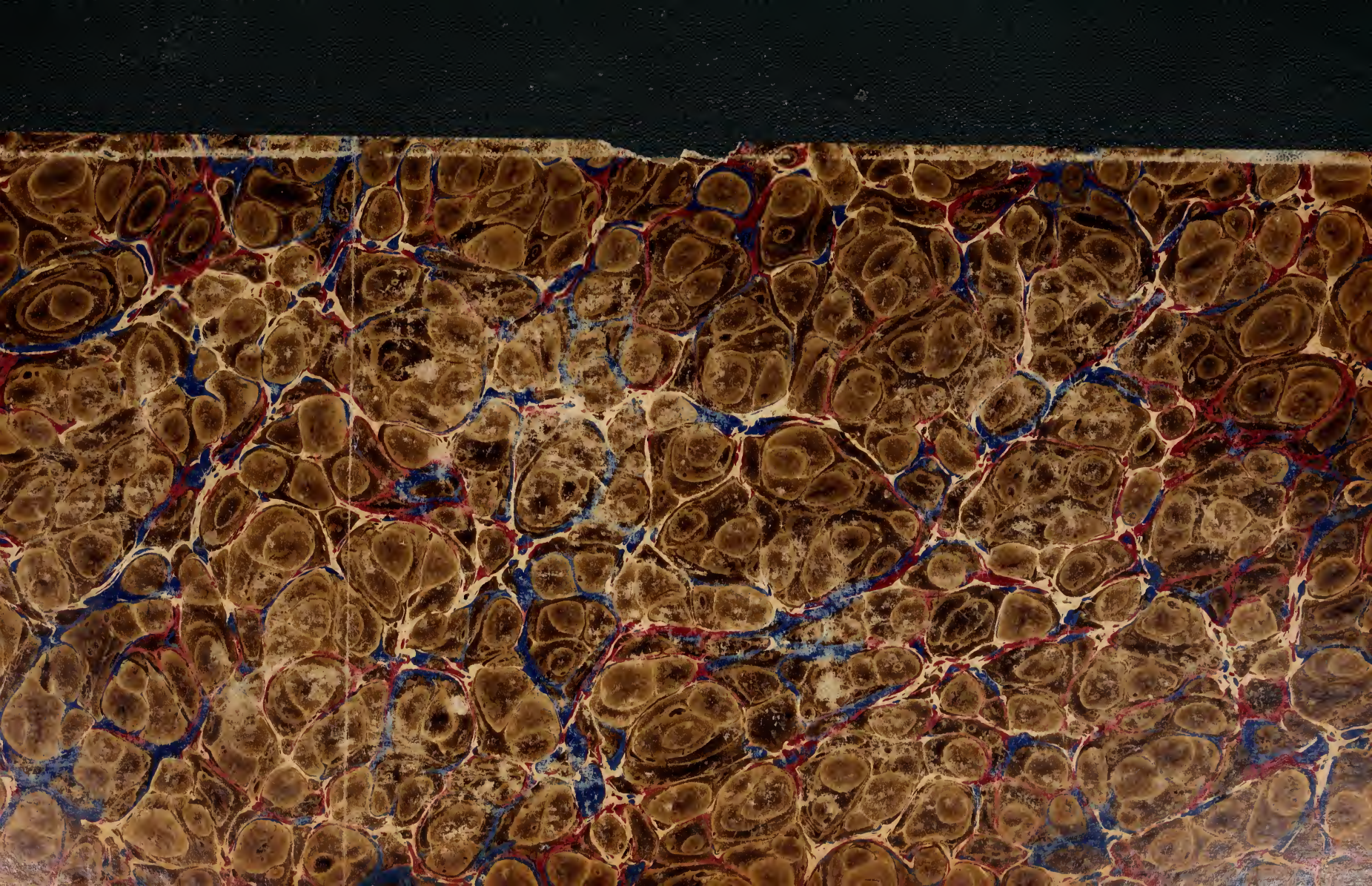
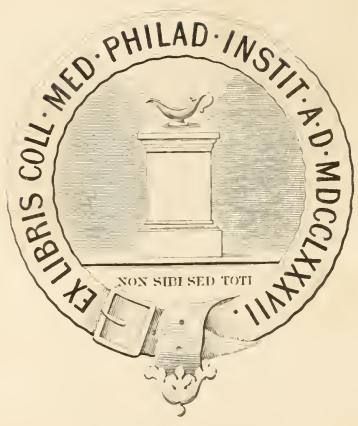


16443



Presented by
R. J. Dunglison, M.D.

Digitized by the Internet Archive
in 2013

http://archive.org/details/medicalage05detr

THE MEDICAL AGE.

A Semi-Monthly Journal of Medicine and Surgery.

EDITED BY

JOHN J. MULHERON, M. D.

VOLUME VI.

DETROIT, MICHIGAN.
GEORGE S. DAVIS, PUBLISHER.
1887.

LIBRARY
COLLEGE OF PHYSICIANS
OF PHILADELPHIA

The Medical Age.

Vol. V. DETROIT, JAN. 10, 1887. No. 1.

Original Articles.

MEDICINE AMONG THE CHINESE.*

BY FLEMMING CARROW, M.D., BAY CITY, MICH.†

Forty-seven years ago the Pres. Mis. Society of New York sent to China as a missionary the REV. PETER PARKER, M. D. To beguile his leisure during the two years of study of the language necessary to fit him for preaching to the Chinese, thereby to convert their souls, he opened a room in Canton as a Dispensary, in which to practice the more certain calling of healing their diseased bodies. To this room the sick poor could come, or at least those who suffered from sick eyes, and obtain relief, as the doctor became very expert as an oculist. DR. PARKER became so enamored of the work that he finally gave his whole time to it, and from this small beginning grew the present hospital where the average yearly attendance, both at its dispensary and in its wards, is 40,000 patients.

In a few years DR. J. G. KERR, a student of DR. GROSS, succeeded DR. PARKER. The local Chinese officials saw the benefit this institution was to their people, and began to subscribe liberally to its support, and under DR. KERR'S able management it became a power in Canton. After 25 years of labor DR. KERR resigned and I was selected as the surgeon in charge, immediately upon my return from abroad where I had been to attend the eye clinics of the old country.

When I arrived upon the field I was struck with the magnitude and importance of the work as well as with my inexperience and inability to take the place of a man who has probably done more surgical work than any man in this country.

I remained at this hospital for 7 years, and returned home some three years ago on account of the failing health of my wife.

After this short history it is not so much to tell you of what I did there as it is to give you my experience of the practice of medicine amongst that strange people, a people whose literature is older than that of any other nation, and who have advanced far in some of the arts without the assistance of any other people. Chinese society, however, is like a stagnant pool, fermenting in its own feculence, whose torpor is disturbed by the monstrous things its own heat brings forth, and becoming more and more poluted, casting up mire or dirt by its own internal commotions, and until the purifying river of peace and good order flows through it there can be no hope of advancement in the sciences. If the character of the people be open to bribery, if officers collude with criminals and the constituents of society present so many repulsive features, if truth be so entirely disregarded and selfishness remain the mainspring of every action, it cannot be expected that the progress made in the professions will be out of proportion to the materials of which the people are composed.

When the Chinese are sick of any serious illness they usually have recourse to the god or goddess who presides over the particular disease with which they suffer, using the services of a Chinese doctor at the same time. If they should recover, they give the credit to the divinity worshipped, and a small fee to the doctor.

If, however, the person dies, the god is not to blame, but the thank-offering is withheld which would have been given had the person recovered. A death is accounted for by saying "it is the reckoning of heaven," but a recovery takes place because the god or goddess wills it. If they were consistent the gods would get a good deal of blame, and they, not being present, could stand it better than the doctors. The great fact that health and sickness, life and death, are always in accordance with the reckoning of heaven, and are controlled by our own habits, and the Supreme being, seems never to enter their mind. When the members of a family are sick, one after another the Chinese try to propitiate a certain destructive divinity. A number of Tanist priests are called. a temporary altar is erected, and on this is arranged the image of the god whom they wish to propitiate. The priests chant their liturgy, ring bells, and bow before the altar. The merit of these performances is supposed to go to the benefit of the sick, and it is hoped that the destroying demon will be prevailed upon to

* A paper read before the Detroit Medical and Library Association on election to corresponding membership.

† President Bay County Medical Society, Corresponding Member Detroit Medical and Library Association, Corresponding Fellow College of Physicians of Philadelphia, Member Societe d 'Anthropologie De Paris, Member Sociedade Sciencias Medicas De Lisboa, Portugal. Late Surgeon in Charge of Native Hospital, Canton, China.

16443

extirpate the baneful influences under his control.

Again, disease is attributed to the anger of some god, and the divinity being found, the god is worshipped while the patient is doctored. Colic is thought to seize one as a positive punishment for those who insult the image of a god, and probably this sentiment conduces very much to the respectful treatment which is universally shown to the idols carried in public procession. Then, too, the Chinese ascribe disease to the enmity of the spirit of a deceased person, and masses are chanted to propitiate the inimical spirit and to induce it to take its departure. One of the most popular idols is the goddess of small-pox. The Chinese dread the ravages of this disease, and on the third day after the pustules have begun to appear, she is worshipped to cause her to use her influence to have the pustules fill.

Now, notwithstanding the submission of the Chinese to the reckoning of heaven, and their belief in the power of the idols to cure their diseases, they make great use of medicine when they are sick. They do not depend altogether upon incantations and charms for relief, but resort to the prescriptions of their physicians as the most likely way to lead to recovery. These prescriptions they mix up with many strange practices to assist the efficacy of the doses, such as pulling the skin of the neck until it is black and blue in order to pull out the evil spirit causing the trouble within. The dissection of the human body is never attempted, though some notions of its internal structure are taught in the medical books. The Chinese have no idea of the distinction between arterial and venous blood, nor between muscles and nerves, as they apply the same word to both. The brain is the abode of a soul principle, and at its base communicates with the whole body through the spine. The larynx goes through the lungs directly to the heart, while the pharynx passes to the stomach. The lungs are white, are attached to the spine, and sound proceeds from holes in them. The pit of the stomach is the seat of the breath, and joy and delight emanate from it. The heart lies underneath the lungs, and is called the prince of the body, and thoughts proceed from it. The liver is on the right side, has seven lobes; the soul resiees in it, and schemes emanate from it. The gall-bladder is below the liver, and when the person is angry it ascends; here courage dwells. The mesentery and pancreas are unknown. The small intestines are connected with the heart, and the urine passes through them into the bladder. The large intestines are connected with the lungs. The kidneys are attached to the spinal marrow and the generative fluid is eliminated by them above to the brain and below to the spermatic cord; the testis, called "wai shin" or outside kidneys, communicate with them. The osteology of the frame is easily learned. The pelvis, skull, forearm, and leg, are considered each as one bone. The pulse is very carefully studied, and its condition regarded as an index of every condition of the body even to determining the sex of an unborn infant. Great parade is usually made by every practitioner in examining this important symptom. The surface of the body receives the closest attention for there is not a square inch without its appropriate name. Plasters and lotions are applied to these places according to the diagnosis of the disease, and a certain amount of faith is necessary to be mixed with the medicine given in order to effect a cure. The practice of the Chinese is far in advance of their theories, and some of their treatises on dietetics and medical practice contain good advice, the result of extended experience. Obstetrics and midwifery are chiefly in the hands of women. Surgical operations are confined to pulling a loose tooth, reducing fractures and dislocations.

The most extensive operation I have ever seen performed by a Chinese doctor was the amputation of a finger. The practice of amputation has its advocates, while caustics and cauteries are extensively used. The moxa, or burning the shape of the amaranthus flower is also frequently used. Entropion is a common ailment and is treated by everting the lid and binding on two pieces of bamboo wood, until the edge of the lid sloughs off, thus leaving as bad a result frequently as the original trouble. Poultices made of disgusting substances are used as external applications. A chicken cut open and laid with its entrails hanging from it on the eye, while the other half is eaten, is a favorite remedy in ophthalmic practice. Leeches and cupping are used as local bloodletters, but venesection is never resorted to. Blood-letting in fevers, says a Chinese writer, is not reasonable, for a fever is like a pot boiling; it is necessary to reduce the fire, but not the liquid in the vessel. Father Ripa, a Catholic missionary, was thrown from his horse and fell fainting in the street. A Chinese doctor was called and made the father sit up in bed, and bound his head with a long bandage, directing two strong men to pull, one upon either end of the bandage, and while his head was being squeezed in this manner the doctor, approaching from behind, struck his patient a smart blow on the top of the head with a stick. This, the doctor told him, was to set the brain, which had been dislocated by the fall. In late years mercury, in the form of calomel and red precipitate, has been used by the Chinese, but their list of mineral medicines is very small, and their knowledge of the proper uses of those they have is smaller still. The number of drug stores in Chinese cities indicates the great consumption of medicines. The medicinal roots

and herbs are prepared by paring them into laminæ; others are powdered in a mortar, whilst others are triturated in a narrow iron trough by a wheel passing over them, moved back and forth by the hands or feet. The use of acids and reagents is unknown. Vegetable substances are generally taken as decoctions. Ginseng and rhubarb enter most every combination, and a prescription would hardly be complete without them. In selecting a doctor the members of a family will sometimes cast lots as to which one of a dozen they will choose, but they are excellent patients, and will do exactly as the doctor tells them.

Contracts are almost always entered into as for how much the doctor will perform the cure, a bargain is struck, medicines furnished, and part of the fee paid, and the patient gives himself up to doctoring in a business-like way. A shrewd physician gets great power over his ignorant patients and frequently becomes very rich.

There is a regular system of fees among the profession, but the remuneration is frequently left to the generosity of the patient.

The Chinese are perhaps as long-lived as any other race, though sanitary statistics are wanting to enable us to form any positive conclusions on this head. The classes of diseases which most prevail in China are ophthalmic, cutaneous and digestive. Asthma and consumption prevail in some parts of the empire, and intermittent fevers in the south. Elephantiasis is more frequent in the centre of the empire, although there are a good many cases in Canton. An interesting fact, however, may here be stated; where elephantiasis prevails there are very few cases of leprosy, and vice versa. This disease is regarded by the Chinese as both incurable and contagious.

Lazar houses are provided by the government for the residence of the infected, and the government confiscates the property of those who may have it. As the amount given each patient is not sufficient for his support, he is compelled to go about the streets begging, hence we see them constantly. The institution of Lazarettos is praiseworthy, but they fail of affording relief, on account of the mismanagement and the peculations of those in charge. These lepers intermarry, and the disease will probably exist among the Chinese until their houses are built more above the ground, better ventilation and improvement in diet are adopted, when it will disappear as it did in Southern Europe. (This is proven on page 461 Ashnut).

No patients bear surgical operations as well as the Chinese, and I presume it is owing to their lymphatic temperament.

The Asiatic cholera has at different times raged in China, but there was no epidemic of it while I was there. Small-pox is a great scourge, and although the practice and utility of vaccination have been known for 50 years at Canton, its adoption is limited to that city to a great degree. No museums of morbid or comparative anatomy exist in the country, nor are there any lectures or dissections, but the routine of practice is followed, which old custom has sanctioned. A statute provides that when a physician, by administering a wrong medicine, accidentally kills his patient, he shall be held for homicide, yet it is seldom carried into execution, and doctors are allowed to kill and cure, *secundem artem*, as patients give them the opportunity.

The sciences as sciences have no existence in China, and they are studied chiefly for their assistance in furnishing articles for their materia medica. On the whole it may be said the Chinese are unscientific, and that while they have collected a few facts, invented many arts, and brought a few to a high degree of excellence, they have never pursued a single object in a way calculated to lead them to a right understanding of it and proper classification of the information they possess relating to it.

I crave the leniency of the Association if I mention a subject about which I am very frequently asked and in which you as physicians may be interested, "the opium-smoking habit." It prevails very widely, but I do not think it deserves that wholesale condemnation with which we are accustomed to treat it. I mean, of course, when compared with the habit of using spirituous liquors to excess. It is not to be denied that suffering and want are brought upon families in consequence of opium smoking, but such cases are moral imbeciles who are addicted to other forms of depravity, and the opium pipe was merely the last straw laid on their enervated backs. The habit of opium smoking entirely entices men away from the more harmful use of the native ardent spirits. We know positively that the immoderate use of ardent spirits in tropical countries does more harm than opium, and to abolish the opium trade with China would be only to lead the Chinese people back to the use of their baneful distillations. The habitual eating and drinking of opium and its preparations is a very different thing from smoking it as the Chinese do. A gentleman tired of business or a student weary from prolonged mental effort, retires to his opium couch, where, after one or two whiffs at his pipe, he is rested and consoled and ready for his work again. In this way it stimulates gently, but does not have a deleterious narcotic effect. I look upon it when used in this way as a luxury which, like all luxuries, can be abused, but when kept within certain limits is a real blessing in so far as it keeps the people from the worse habit of drinking. Do not understand that I approve this habit. I am only saying that I see no more harm in using opium as the great majority of the Chinese use

it, than in smoking tobacco, for blowing smoke bubbles can indeed scarcely be a more ethereal enjoyment than drawing opium smoke in the mouth and blowing it out through the nose.

As students of anatomy and as observers of the curious, the subject of foot-binding in China may have some interest to us. The custom of binding the feet of Chinese women dates back to a very remote period, certainly as far back as the middle of the tenth century. It will be unnecessary to give any of their reasons for this curious practice, as it is sufficient to say that it is almost universally adopted throughout the empire amongst the middle and upper classes. The age at which the binding is commenced in southern China is from four to six years, as proved by plaster casts taken by me, and now in the museum of the Philadelphia County Medical Society. In the process of binding there are three steps: First, the binding of the four small toes under the sole of the foot. Second, a forcing together of the plantar portions of the metatarsal bones. Third, the os calcis and astragalus are forced downwards until the heel is vertical. The bandage used is about six feet in length and about two inches wide. This is worn during life. When the first dressing is to take place the feet are soaked in hot water and then bound tightly. When this bandage is removed to be cleaned, there is an exfoliation of cuticle, the feet bleed a little and there is some circumscribed gangrene. Pulverized alum is put between the toes and in the creases under the sole of the foot.

The shaping of the foot requires two or three years, during which period there is considerable pain. The feet are unbound about once a month. The suffering is usually quite severe; at night the little girl will lie with her legs across the edge of the bed-stead, letting the feet hang down so as to benumb them. She passes many a weary night. The calf of the leg gradually diminishes in size from want of use, and the whole extremity below the knee is shrunken and atrophied. Three of the casts taken by me, and now in Philadelphia, measure 4½ inches from heel to toe.

Since, as physicians, we are naturally opposed to abortionists and infanticide, it may not be uninteresting to inquire into this murderous custom in China. A knowledge of inducing abortion is unknown; hence, if illegitimate children are born, and they be girls, the Chinese have adopted the most inhuman method of drowning their offspring. It is practiced most commonly in Canton, and those of us who have lived there find it no uncommon sight to see female infants floating in the river. Although it is practiced so commonly, it is not popular nor justified by the educated classes, and circulars are occasionally distributed, remonstrating against so horrible a crime. Nothing is said against the drowning of boys, because boys are necessary to worship at the tomb of their deceased ancestors; hence, are very much desired; but as girls cannot do this, they are not so much wished.

A Chinaman will readily admit the prevalence of female infanticide, and will inquire if it is practiced in our own country. The chief reason for the destruction of female infants amongst the poor is their poverty. For a laboring man to support a family of girls and to marry them off according to custom, is regarded as an impossibility; hence, to prevent selling them to a life of infamy and shame, drowning seems to them a more humane method.

Poverty, however, cannot be the excuse amongst the rich, and yet that the custom prevails with this class rests on the most ample and explicit testimony. When seriously appealed to on the subject, though all deprecate it as contrary to the dictates of reason and the instincts of nature, many are ready boldly to apologize for it, and declare it to be necessary. While it is not, in fact, directly sanctioned by the government, or agreeable to the general spirit of the laws and the institution of the empire, yet it is tolerated by the officials. No measures are ever taken to find out and punish the murderers of their own infants. In China the doctrine of filial piety is highly lauded, and children are required by law to render the most implicit deference to the will of their parents, but parents are permitted to discriminate between the sex of their helpless offspring, destroying the females *ad libitum*, and lavishing their care and love on the male. How singularly are they without natural affection on this subject!

After this brief glance at some of the customs of the Chinese, I will trespass upon your time to give you an idea of the mode of practice amongst the foreigners living in China. Foreigners of all nationalities congregate at those ports in China where our treaties allow us to live, and what I may relate of Canton holds good of all other ports. The foreign community here numbers some 300 people, all engaged in trade with the Chinese, or holding some office under their own government, such as consuls or envoys.

There is in every community a physician, and as his visits among so small a number would not give him a sufficient income, each house contributes annually a certain sum, according to the number of its inmates, to the doctor, thus making him a handsome salary, which is always the same whether there is sickness or not. Any work done amongst the Chinese is usually repaid by presents of different kinds: occasionally, however, he is paid by them in money.

The presents given are usually out of proportion to the service rendered. With the present

is usually sent a board, having engraved upon it some couplet in which the thanks of the patient are conveyed, or a letter written for the same purpose, a sample of which is as follows:

"He lavishes his blessings, but seeks for no return,
Such medicine, such doctor, since taen were never known.
The medicine, how many kinds most excellent has he;
The surgeon's knife it pierced my eye, and spring once more I see.
If Tung has not been born again to bless the present age,
When sure 'tis see reanimate again upon the stage;
Whenever called, my dear sir, to see your native land,
A living monument, I'll wait upon the ocean's strand."

I think it may safely be said that physicians residing in China have found the Chinese a most grateful race. They appreciate what is done for them, and are thus an example which might well be copied by our more civilized people. In ordinary cases of sickness the foreign doctor is seldom called, as the Chinese prefer their own physicians, but in surgery they know absolutely nothing, and it is in this field the services of the port physician are asked in private practice. They are excellent patients, giving themselves up entirely into the hands of the doctor. Many of our medical works have been translated into the Chinese, and in the different hospitals there is a small class of Chinese young men getting what training can be had from the physician in charge. They make excellent assistants, and while not much can be said of their knowledge as diagnosticians, they certainly are good imitators, and this counts for something in surgery. After four years of this schooling they usually begin the practice of medicine among their own people, performing the simplest operations, and certainly improving the practice of those who are willing to be improved among their own physicians.

The Chinese character, not only as regards medicine, but in all departments, offers a most interesting theme for study. The civilization of China has been developed under its own institutions; its government has been modeled without knowledge or reference to that of any other kingdom; its literature has borrowed nothing from the genius or research of the scholars of other lands; its language is unique in its symbols, its structure and its antiquity; and its people are remarkable for their industry, peacefulness, numbers, and habits. Therefore, the examination of such a people can hardly fail of being instructive, and this is my excuse for having bored you so long.

CHICAGO MEDICAL SOCIETY.

OFFICIAL REPORT.

Stated Meeting, Monday, Dec. 6, 1886.

The President, EDMUND J. DŒRING, M. D., in the Chair.

DR. JOHN A. ROBISON read a paper on the

ANTIPYRETIC ACTIONS OF ANTIPYRIN AND THALLIN.

in which he had collected and condensed the results of the experiments of a large number of clinicians. The largest number of observers agree that antipyrin is a safe, efficient and unobjectionable antipyretic. Contrary to belief in general, it does not have a depressing or debilitating effect on the heart, whereas thallin has. Antipyrin causes no change in the blood, whereas thallin has a deleterious effect on the blood and veins. In conclusion, the author believed antipyrin should always be given to produce apyrexia in cases where the temperature is excessively high. He does not believe the drug has any influence to lessen or prolong the duration of the continued fevers. He also stated that it not only lowers the temperature, but relieves the pain that accompanies acute articular rheumatism with endocarditis, especially if given with alkalies.

DR. J. J. M. ANGEAR said: I have not given this subject any special study, but the subject of temperature I have, and it may not be amiss to speak of some difficulties which we have to contend against. If radiation is increased or diminished, and metabolism remains normal, we have increased or decreased temperature; or if metabolism of the body be increased or diminished and radiation remains normal, then we have increased or decreased temperature. We have no means of arriving at any definite conclusion whether our patient, with increased temperature, is suffering with increased metabolism or decreased radiation, or both. We know from observation and from various experiments, that the internal part of the body is very frequently hotter than normal during the cold stage of fever, and cooler than normal during the febrile stage. May not the sum total of caloric in the body be diminished when the thermometer tells us that it is increased, and *vice versa*? If we answer yes, then we are found trying to diminish the temperature, when we should be husbanding what we have. Does not this show that there is a certain amount of pathological knowledge in regard to body temperature which we have not yet arrived at? And our therapeutical knowledge is necessarily as defective in this regard.

Do antipyretics facilitate radiation or check metabolism, or both, or do we know anything about it except its action upon the thermometer? If we could arrive at some definite, pathological conclusion as regards the pyrexial state of the patient, then we could, perhaps, arrive at some scientific knowledge of the action and use of all antipyretics. Had we an instrument by which to measure the amount of radiation and metabolism, it would be of far greater value to us than the thermometer.

Dr. C. C. Paoli said: The paper was well prepared and interesting, but the question arises, do we know anything about the essential nature of fevers? I answer, no. But we know the effect, if we do not know the nature, and in fevers we generally use remedies to lessen the temperature. I have used antipyrin in only eight cases, two of typhoid fever, two of scarlatina, two of lung trouble. In regard to the fever, I admit that the remedy had an antipyretic effect. In two cases the patients vomited as an effect of taking this remedy. I commenced with ten grains, and it diminished the temperature but did not stop the course of the fever, which lasts usually from five to six weeks. One effect I have found from the use of antipyrin, is the lessening of nervous irritability. In a case of tuberculosis, after using antipyrin, I began with quinine, and found it more of a tonic. In the case of scarlatina in which I used antipyrin I did not observe any favorable effect; it lessened the temperature, of course, but the same effect was produced by quinine.

Dr. H. Gradle said: Although my line of practice does not often enable me to watch the effects of antipyretic drugs in disease, I can speak of the effect of antipyrin in one disease, viz., the dentition fever of infants; which, although not usually serious, is in a great many instances annoying, and in which, when the fever is high, there is a possible danger of convulsions. I have never heard of any drug that will reduce the fever under these circumstances as promptly and with as little disturbance as antipyrin. With a temperature of 103° a child can be rendered quiet in the course of an hour by one dose of four grains, and perhaps a second dose of two grains, and be pacified for the entire night. I wish to ask the author if he has had any experience in the continued use of thallin in typhoid fever, with the effect of aborting the disease? According to some rather startling statements made several months ago by Ehrlich, it was claimed that it reduced the fever permanently in the course of eight to twelve days.

Dr. G. W. Webster favored the use of antipyrin. He had used it in cases of typhoid pneumonia. One point is the favorable action of antipyrin on the headaches of typhoid fever. One of the most distressing symptoms when the temperature is very high, is the severe. continued headache and the delirium which always accompanies it. He had not found any other remedy that would have as good an effect in these cases as antipyrin, which always relieved the headache promptly.

Dr. H. T. Patrick said: I am quite partial to antipyrin, and have used it in a number of cases. It will often effectually reduce the temperature when baths and sponging will not. In a case of pneumonia in a child of eight years I gave antipyrin from the beginning to the end, with good results, except for one day when I tried sponging instead. The child was sponged off six times in six hours, five to ten minutes each time, without any reduction in temperature. Sometimes cold baths have no effect in reducing the temperature because of a very thick panniculus of adipose tissue. Here antipyrin is indicated. The continuous administration of antipyrin in tuberculosis I have found in a few cases very gratifying. In one case ten to fifteeen grains were given every afternoon for a term of ten weeks, with great relief to the patient. His temperature was 103°, and there was prostration and irritability of mind. The antipyrin was a relief to the patient, and to his family, on account of the improvement in his disposition.

Dr. J. Frank had had a personal experience with antipyrin, having taken it two years before while suffering with typhoid fever. The temperature ran as high as 106°, and quinine had no effect in reducing it. He took antipyrin in 15- and 30-grain doses, first by mouth and then by rectum, with the effect of rapidly reducing the temperature. He has used it in practice in the treatment of erysipelas and typhoid fever, but does not depend upon it entirely, giving it when the temperature rises very high. In erysipelas he has always found that antipyrin will reduce the temperature.

Dr. C. W. Leigh said: I have seen antipyrin used in a limited number of cases, three or four, of typhoid fever, and none of the patients were older than twenty-one. In these cases there was a visible decrease in temperature, and the delirium was lessened very much.

Dr. J. A. Robison said that he had not pretended to give anything except the results of the observations of a large number of physicians who had used this drug and recorded their experiences. Also the results of quite a number of experiments of therapeutists, as for instance Umbach's experiments in regard to the decrease of tissue waste. I did not try to detail all these different experiments, but attempted to epitomize the well-known actions that have been observed of the drugs. Two of these actions, the increase of heat radiation by the dilatation of small blood-vessels, and the decrease of oxidation, are the main factors in producing the fall of temperature. Dr. Angear says if we can arrive at some conclusion in regard to the manner in which the drug acts, we can use it. I think we have arrived at a conclusion; these experiments have been carefully conducted, and we have seen that antipyrin actually reduces high temperature without any danger to the patient, and it is only in cases where the high temperature itself is a danger to the patient that its use in large doses is to be recommended. In regard to its use in

aborting typhoid fever, I have not tried it except in four cases; one was a boy under seventeen and another one fourteen. The temperature was about 103°. I gave large doses and in three days all signs of fever had disappeared. A few days afterwards another member of the same family was taken sick, and the antipyrin was used as before, but that patient went through all the stages of typhoid fever. In another family there were five cases of typhoid fever. Two of the family had had the fever, one of them dying; then three others took sick. Antipyrin was given in large doses in all these cases, but it failed to abort the fever in any of them.

DR. HENRY T. GRADLE read a paper entitled DISEASES OF THE VAULT OF THE PHARYNX.

He emphasized the fact that this region is too much neglected by general practitioners in spite of the importance and curability of some of the diseases occurring there. According to his experience, the best examination can be made by means of a large mirror and a palate hook, and this is facilitated by using cocaine when necessary. He gave the history and symptoms of enlargement of the pharyngeal tonsil, which trouble is often called adenoid vegetations, but as usually seen in this country there are no coxcomb-shaped vegetations: it amounts rather to a uniform enlargement of the tonsil at the roof of the pharynx. The condition is of especial importance on account of the liability of ear disease to which it gives rise. Often reflex symptoms are observed like asthma, cough, bronchitis, and headache. The tonsil should in every case be removed when enlarged. This can be done by means of the galvano-cautery, but it generally requires many sittings, and the process is tedious. The quickest way is by means of scoops or sharp curettes, according to the plan of TRAUTMAN. The hemorrhage is never alarming and the pain not very great. The result of the operation is always very gratifying to the patient. The pharyngeal tonsil may require treatment even when there is not much enlargement. Sometimes irritation is produced by the presence of white plugs consisting of bacterial masses in the crypts of this gland, which condition can be removed by the galvano-cautery. In other instances the glandular tissue forms reddened, tender spots at the junction of the lateral walls and the roof of the pharynx above the Eustachian orifices. This condition may keep up inflammatory ear trouble until removed by the galvano-cautery. The speaker further contrasted the relative curability of hypertrophic chronic catarrh of the nasal pharynx with the almost hopeless condition of that form of catarrh, in which no lesions are found on careful inspection. In the hypertrophic form of disease he has found nitrate of silver most serviceable. The form of catarrh in which no lesions of any account are found, has been attributed by TORNWALDT to catarrh localized in a small recess of the mucous membrane in, or just back of the pharyngeal tonsil, known as the bursa pharyngea. The speaker has not been able to verify the existence of this bursa, and considers the pit which is sometimes seen with the rhinoscopic mirror in this region, as a part of the pharyngeal tonsil. He has followed TORNWALDT'S directions to cauterize this spot in obstinate cases of catarrh with some little success, but without believing that there is any catarrh limited to this recess. He has seen a few cysts in this locality, but considers them as being formed in the substance of the pharyngeal tonsil, and not due to the closure of the alleged bursa pharyngea.

DR. W. E. CASSELBERRY said: I agree with the author on the importance of the pathological states which occur in the naso-pharynx, and I would particularly emphasize the importance of the subject in connection with ear diseases. It is usually neglected because the practitioner does not use the rhinoscope. This can readily be used since the introduction of cocaine; formerly, the pharynx being so irritable, it was a different matter, and considerable practice was necessary in order to acquire the use of the mirror, but now a 2-per-cent. solution of cocaine sprayed around the pharynx will so reduce the sensibility that the introduction of the rhinoscopic mirror is comparatively easy. I was somewhat surprised at the size of the mirror recommended; usually a small one about one-half inch in diameter is used. This, of course, will not show the entire nasal-pharynx at one time, but it can be easily rotated from side to side. With a large mirror a hook is always necessary, which usually complicates the case and is more apt to gag the patient than the use of a small mirror without the hook. I am accustomed, in considering the diseases of the nasal-pharynx; to divide the inflammatory affections into three classes. First, the simple chronic naso-pharyngitis; second, the hypertrophic naso-pharyngitis, and third, the atrophic naso-pharyngitis. In the first there is a simple inflammation of the mucous membrane and of the connective tissue beneath the membrane, the connective tissue being sometimes involved to such an extent as to form, here and there, thickened areas of infiltration. I think that many of the cases in which the author sees no perceptible lesion in the naso-pharynx can be graded in this class. The hypertrophic form of disease may be sub-divided into two classes, one in which the follicular structures are uniformly hypertrophied, the group of follicles constituting the tonsil of LUSCHKA being enlarged and appearing in the rhinoscopic mirror of about the size and configuration of an ordinary tonsil of the throat. And the other subclass in which the enlargements are pendant,

pear-shaped bodies resembling stalactites and hence called the stalactitic form. This is the form which was originally described under the name of adenoid vegetations, and the one which is met with most commonly in Germany, whilst the uniform enlargement is more common in this country. The atrophic naso-pharyngitis, as is the case in the pharynx itself, may be regarded as a later stage of the hypertrophic naso-pharyngitis, although in rare instances it may commence in the atrophic form. During the hypertrophic stage the proliferated connective tissue cells gradually encroach upon the glandular structures, and, so to speak, squeeze them to death, whilst the connective tissue cells themselves, as in cirrhosis of other organs, of the liver, for instance, later contract and atrophy. The mucous membrane is now pallid and thin, and is encrusted over with a dry secretion. This is the form of disease which so often gives rise to fetor of the breath, especially when it involves the naso-pharynx, although the disease is not restricted to that locality. In reference to the treatment there is little to add to what has already been said. I have not employed the curette much, as my patients will not tolerate the blood and pain. The pain now is not as great as before the introduction of cocaine, but the blood horrifies the younger patients, and the parents. I have found an equally efficient, although a more lengthy treatment, in the galvano-cautery. It is bloodless and painless. In cases of stalactitic growths the best method is the galvano-cautery snare. For the uniformly enlarged variety I employ a HEMMING naso-pharyngeal electrode. Nitrate of silver as a means in the treatment of catarrhal conditions, although it has been greatly abused, is unquestionably effective if properly used. In cases of simple chronic inflammation of the mucous membrane, where there is thickening of the subcutaneous tissue, a strong solution applied by means of the cotton swab, 40 grains to the ounce, used by the physician every day, then every two days, and finally twice weekly, will lead to the absorption of the infiltrated material. Strong solutions of nitrate of silver (40 gr. to ʒ i) cause absorption of infiltration, whilst weak solutions (10 gr. to ʒ i) stimulate the further production of infiltrated material and the activity of the glands. Consequently, weak solutions will only aggravate the hypertrophic form of disease. For the same reason a weak solution will benefit the atrophic form. In reference to the pharyngeal bursa, I am of the opinion that too great importance has been ascribed to it.

DR. F. O. STOCKTON said: My experience in the treatment of chronic nasal pharyngitis by the use of nitrate of silver has been anything but pleasing, and I have never seen a beneficial result from it. It is recommended by many in the form of powder, 1 grain of nitrate of silver powdered with some drug and distributed over the membrane, but my experience has been negative. Solutions I have found to be of no benefit whatever. It discolors everything, is a dirty, useless drug, and greatly overestimated.

The use of the curette in removing adenoid vegetations is quite a recent thing. The method that the author speaks of I have not tried to any great extent, and I prefer the gouge forceps; I generally use the galvano-cautery, as it is now possible to use it without difficulty with the aid of cocaine, and there being no blood lost is a very important consideration in the treatment of young subjects, because, even if they have no pain, if they see a drop of blood they think they are being killed, and begin to scream.

DR. M. R. BROWN said: In regard to the mirror, the size recommended by the author I think rather large, and apt to produce gagging by coming in contact with the pharyngeal walls, but if cocaine is used this may be avoided, and should a mirror about half the diameter of the one shown be employed in posterior rhinoscopy, nine out of ten instead of three out of four cases can be examined at the first visit.

Referring to the pharyngeal tonsil producing bronchitis and cough, the irritating mucus finding its way into the larynx has a great deal to do with producing laryngitis, which will give rise to cough; and the case of bronchitis mentioned by DR. GRADLE was evidently of a reflex nature. After having treated the pharynx with nitrate of silver for any length of time, there results a thickening of its mucous membrane; there is absolutely nothing to be gained from the use of this remedy in the conditions mentioned; at least, such has been my experience after having employed it in various strength solutions, in the different diseases of the pharynx. I occasionally make use of the cold wire snare, but prefer the galvano-cautery. The gouge or curette I also employ with satisfactory results; but, owing to the pain it causes the patient, have devised a punch forceps, the use of which is attended with less pain than, and is as satisfactory as the gouge.

Of the hypertrophied tonsil receding between the ages of 25 and 30 years, I have seen a number of cases in which the patients with this growth were beyond this age; to-day examined a man of 35 years of age, and a short time since removed a similar growth from a male who was over 50 years old.

Speaking of the microscopic appearance of the naso-pharyngeal growths, MACKENZIE says that in adenoid vegetations "the glandular element is, as a rule, more marked in growths taken from the vault of the pharynx, whilst in vegetations taken from the lateral walls the stroma of Kis is found in greater adundance."

DR. H. GRADLE said: As to the size of the

mirror, of course where the patient will not permit you to use a large one you will have to use a small one, but where you can use the large mirror, there is an advantage in gaining a full view of everything. In speaking of being able to examine three out of four, I referred to patients as they came. As a rule, I do not use cocaine in the first examination, because it is so disagreeable. I do not use the hook where the distance between the posterior wall and the pharynx is considerable. As regards nitrate of silver, there are many conditions in which it is entirely useless. One is the practice of cauterization with the solid stick. I have never done this. But there are certain conditions where nitrate of silver is useful and acts promptly, viz., chronic hypertrophic catarrh. And it is sure to give relief in the more acute forms of catarrh where the pharyngeal tonsil is not enlarged enough to cause damage, but swells from temporary congestion. The patient can use a preparation of four-per-cent. and apply it himself with a brush, but it is preferable to have the physician use it. The spray, according to my experience, is more effective and not so disagreeable as a dry powder, but it requires considerable care on the part of the physician to avoid staining the clothing.

Dr. F. E. Waxham reported a case of

PSEUDO-MEMBRANOUS LARYNGITIS, TREATED BY ELECTROLYSIS.

Almost every disease of the human body has been treated by electrolysis, but the larynx has only recently been invaded. It seems probable that stenosis of the larynx from membranous exudation may be reduced by the galvanic current, the false membrane being destroyed or detached. On October 26 the author was called so see a child of eight years who had been sick nearly a week with membranous croup. She was in the last stages of asphyxia, and all hope of her recovery had been abandoned. An intubation tube was threaded with platinum wire and used as a negative electrode, and introduced into the larynx without difficulty, when respiration at once became easy. The child coughed up considerable soft membrane and ropy mucus and became conscious. The platinum wire was then insulated by passing it through very small wire tubing, and the projecting wire was attached to a twelve-cell McIntosh galvanic battery. A positive electrode, which consisted of an ordinary sponge moistened with warm water was placed over the larynx, and a current from ten cells employed. The current caused some pain and considerable redness of the skin under the sponge, and was reduced to eight cells and passed for five minutes, during which time considerable mucus and softened membrane were expelled. The tube was withdrawn and the child drank two glasses of milk and passed into a quiet sleep. About two hours later, the respiration having become labored, electrolysis was again performed in the same manner, a current from first eight and then ten cells being employed. The effect of the current was to detach and expel patches of false membrane. No further experiments were made with electrolysis. The child died on October 28. It was expected that the galvanic current would have but little effect upon the false membrane, but that it would relieve the swelling and congestion of the tissues. On the contrary, the current had a decided effect in loosening and detaching the membrane, and the secondary effect was to increase the swelling and congestion.

Experiments were made on two rabbits with a view of ascertaining the effect of the galvanic current on the healthy larynx. One was given chloroform, the tube introduced into the larynx and a current from eleven cells passed for five minutes. Some dyspnœa followed, which was attributed rather to rough usage than to the effect of the current. This subsided and the rabbit recovered. The other rabbit was given a current from eight cells, and apparently suffered no inconvenience.

The author thought no deductions could be drawn from a single case; that the current might have been too strong, or not strong enough; that possibly it may be necessary to use an anæsthetic and employ a current strong enough to verge on cauterization. These points could be decided only after further investigation.

Dr. W. E. Casselberry said: The report is an extremely interesting one, and I suggest that the experiments be carried further, to ascertain if the galvanic current has any effect in softening the false membrane outside of the body.

Dr. Franklin H. Martin said: I have used electrolysis for about three years in the treatment of stricture of the urethra, stenosis of the uterine canal, chronic inflammatory exudations surrounding the uterus, and in fibroid tumors. In listening to this interesting report the question occurred to me whether the effect of loosening the croupous membrane could be attributed to the electrolytic effect of the current of electricity, or merely to the mechanical effect of the electrode. Electrolysis describes the terms upon which it acts; in the case reported we get no evidence of this action. I should be inclined to attribute any beneficial effect that might have occurred to a counter-irritant effect of the positive sponge electrode that was situated externally. In regard to the power of electricity to dissolve substances similar to the exudate found here, I should judge from my experience that it possesses that power. I have been told that a current of elec-

tricity passed through a culture of bacteria had the effect of destroying the life of the germ. May this not explain an action that might be worth considering in similar troubles to the one under consideration?

Dr. J. Frank suggested that if the author had used a weaker current he would have had a better result. In stricture of the urethra five cells of the McIntosh battery, with the fluid reduced one-half with water, are used. Twelve cells could hardly be borne on the skin. It would dissolve the membrane and produce inflammation.

A THEORY OF THE ACTION OF ALTERATIVES—SYRUP TRIFOLIUM COMP. IN SYPHILIS.

BY J. E. HOFFMAN, M. D., POUGHKEEPSIE, N. Y.

I have been using Syrup Trifolium Comp. in my practice, alone, and in combination with electricity (for a stimulus) for several months past in cases of scrofula, rachitis and skin diseases of a syphilitic origin, with apparent excellent results. Whether or not the results, as far as they have gone, will prove permanent I, of course, cannot say, as the time has been as yet too short.

Scrofula, as I find it, may be divided into two distinct classes. In the first class the children will be found to develop usually rapidly, are quite active, of a fair complexion, cheeks flushed, eyes bright, animated and fiery, hair blonde or brown, with generally a tendency to curl. These patients are also, as a rule, very impressionable. In the second class we find a marked lack of ambition, a lymphatic disposition, bloated appearance, especially of the face, nose and lips, and a prominent chin. These patients develop slowly, suffer with various forms of indigestion, and are subject to blenorrhœas and to skin diseases.

Scrofula is also a predisposing cause of a number of other serious diseases, such as inflammations, formations of pus, enlargement and abscesses of the glands, phthisis, marasmus, hypertrophy and necrosis of the bones.

If we stop for a moment to think of just what the result of scrofula is, we will find that the true origin of all mischief can be traced more or less directly to the glandular and lymphatic system. The lymphatic glands are situated upon the course of the lymphatic vessels, on the inside of the limbs at the flexures of the joints, in the axilla and the groin, in the thoracic and abdominal cavities, along the sides of the spinal column in the mesentery and in the sides and anterior part of the neck. The greatest number of lymphatics, however, are found in the mesentery. So much for the lymphatics. Now allow me please to give a brief outline of digestion taken from Huxley's Physiology.

"The chief solvent power of the gastric juice is attributed to the pepsin. By continual rolling about, with constant additions of gastric juice, the food becomes reduced to the consistence of pea-soup, and is called *chyme*. In this state it is, in part, allowed to escape through the pylorus and to enter the duodenum; but a large quantity of the fluid is at once absorbed, making its way by imbibition through the walls of the numerous vessels of the stomach into the current of the blood, which passes through the gastric veins to the vena porta.

About this stage of digestion the pancreas is called upon to act; its blood-vessels dilate, it becomes red and full of blood, its cells secrete rapidly, and a copious flow of pancreatic juice takes place along its duct into the intestine. The secretion of bile by the liver is much more continuous than that of the pancreas, but is not so markedly increased by the presence of food in the stomach.

The bile and pancreatic juice together, in the duodenum, mix with the chyme and convert it into *chyle*.

Chyle differs from chyme in two respects. In the first place, the alkali of the bile neutralizes the acid of the chyme. In the second, both the bile and pancreatic juice appear to exercise an influence over the fatty matters contained in the chyme, which facilitates the subdivision of these fats into very minute separate particles. The chyme, which results from the digestion of fatty food, is a mere mixture of watery fluid with oily matters, which are ready to separate from it and unite with one another. In the chyle, on the other hand, the fatty matters are suspended in the fluid, just as oil may be evenly diffused through water by gradually rubbing it up with white of egg into what is termed an emulsion.

The chyle with these suspended particles looks white and milky. The conversion of starch into sugar, which seems to be suspended wholly, or partially, so long as the food remains in the stomach, on account of the acidity of the chyme, is resumed as soon af the latter is neutralized, the pancreatic and intestinal juices operating powerfully in this direction.

Recent observation has shown that pancreatic juice has a strong effect on proteid matters, converting them into peptones, differing little from the peptones resulting from gastric digestion. Hence it appears that, while in the mouth amyloids only, and in the stomach proteids only, are digested, in the intestines all three kinds of food stuffs, amyloids, proteids and fats are either completely dissolved, or minutely subdivided, and so prepared for their passage into the vessels.

As the chyle is thrust along the small intestines by the grasping action of the peristaltic contractions, the dissolved matter which it contains is absorbed, in the ordinary way, by

osmosis into the vessels of the villi. The minute particles of fatty matter, on the other hand, which, not being dissolved, are incapable of osmosis, pass bodily through the soft substance of the epithelium into that of the villi, and so into the beginning of the lacteals. As the network of capillaries lies outside the lacteal radicle in each villus, it would appear probable that the blood-vessels must carry off the greater part of the soluble matters of the chyle. It is possible, however, that some of these pass by simple diffusion into the lacteals as well as into the blood-vessels. We are not, in fact, in possession of exact knowledge as to which constituents of the chyle pass into the lacteals and which into the blood-vessels (or which into both), except on one point, and that is, that the minutely divided fat passes not into the blood-vessels, but into the lacteals, fills them, and only enters the blood after a roundabout passage through the mesenteric lymphatics and the thoracic duct."

It may be asked what has all the foregoing to do with "scrofula and its treatment?" I will explain. We learn from the process of digestion that fatty substances are not digested in the stomach, but that they are emptied into the duodenum, where, with the combined action of the bile and pancreatic juice the fats become emulsified, and are broken up in particles sufficiently small to pass, not into the blood-vessels, but into the lacteals, and only entering the blood after a roundabout passage through the mesenteric lymphatics and the thoracic duct. We also know that all other substances, not oily, are absorbed into the blood by inhibition, through the walls of the numerous vessels of the stomach.

Scrofula being a disease whose poison is chiefly deposited in the lymphatic glands throughout the body, be it the glands of the neck, along the bones, or elsewhere, I feel that the only way in which a strong effect might be obtained will be by the use of the oils or glucosides of alterative medicines, as these cannot reach the circulation proper, until they have passed the very reservoir of scrofulous poison.

I do not deny that there is poison in the blood and tissues as well, but I think and feel that the more directly an antidote can be applied to a poison, the more speedy and sure are its counteracting effects.

Where a disease is strictly a blood-poison, medication by the stomach, with such a preparation as the stomach is sure to absorb and carry into the circulation direct, can alone be of high value and give success. But where, as in scrofula, a poison is in a certain part of the human organism, as this poison in the glands, I feel that even though the present alteratives can do much in building up the general constitution, and apparently check the progress of the disease, they fail to destroy the germ in its burrow, and therefore the bulk of the poison remains unmolested. Either the oily principle of an alterative ought to be prescribed, or if obtainable, the medicines ought to be given in a pill or capsule so prepared that the stomach cannot digest it, so that the full force of the medicine can be taken up by the lacteals and pass through the lymphatic system before entering the general circulation.

Correspondence.

PHYSICIANS' FEES.

It is a notorious fact that physicians are poor financiers. The particular reason that they are not properly recompensed, and accumulate thousands of dollars of uncollectable accounts, is because they do not demand pay—and *get it.* When the practice of medicine is the business of a man's life, it is just as legitimate as any other business. It is no more proper for a doctor to do a long credit business, or dead-beat business than it is for men laboring in any other field. The first great duty, of course, is "to answer the cry of humanity." The second great duty is to promptly send in your bill. A physician has a right to something more than bread to keep him from starving. He has a right to the aids through which all of his higher enjoyments and usefulness come. If you do not hear from your patron promptly send him another reminder, or call upon him personally. By this means you will very soon find out whether he intends to pay the bill, or whether he belongs to a large class who never pay a doctor. There is too much sentimental nonsense in the idea that a physician must be an unselfish, devoted humanitarian, giving up the strong years of his life running after dead-beats. Business is business.

Money ought by no means to be regarded as the chief end of man's life, neither is it a trifling matter, to be held in philosophical contempt, representing, as it does, to so large an extent the means of physical comfort and social well-being. Some of the finest qualities of human nature are intimately related to the right use of money, such as generosity, honesty, justice and self-sacrifice.

We cannot all live like Dr. Tanner—on air. We also have the teaching of the Good Book that "he who does not provide for his own household is worse than an infidel." There is nothing so completely demoralizing to a physician as to be owing grocer, butcher, livery, and to be on the black-list.

Comfort in worldly circumstances is a condition which every man is justified in striving to attain by all worthy means. It secures that physical satisfaction which is necessary for the

culture of the better part of his nature, and enables him to provide for his own household. Nor ought the fact to be any less indifferent to physicians than to others that the respect which our fellow-men entertain for us depends, in no slight degree, upon the manner in which we improve the opportunities which present for our honorable advancement in life. The very effort required to succeed in life stimulates a man's sense of self-respect and disciplines him in the exercise of patience, perseverance and the other virtues. The provident and careful collector must necessarily be a thoughtful man, for he lives not merely for the present, but for the future.

The fact that physicians are not properly recompensed, and it is a fact, for in no calling where there are so many dollars earned is there so little wealth represented, is a fault of ourselves.

In general practice it must, almost necessarily, be a credit business. But a physician need not remain long in a place before he learns to sift the wheat from the chaff.

We have an overcrowded profession. Admission without proper preparatory learning has increased the number in our ranks, and the great all in all is—get patients.

There is great professional rivalry and struggle for existence, so that doctors are too anxious for a new patron, without regard to fee. Self-preservation is the first law of our nature, and a very proper question to ask all unknown parties is, "How about the pay?" A few will be insulted. A few will be insulted if you at once send in your bill after work is performed. The sooner you insult these the more money you will have in your pocket. Physicians are waiting to earn a dollar. It is far more important to collect a dollar. I know by practical experience that a physician's business can be made one of almost no dead-beat accounts. In other words, my books will show what I will get just as much as the books of those in any other credit business. And I live in a community built up out of lumber interests, where there are as many dead-beats to the square yard as in any other place on the globe.

My preceptor's advice was "never do anything for a dead-beat without pay in advance."

At the end of my first year's practice I had $1,600 coming from delinquents, not $100 of which was collectable. I then saw that my welfare did not depend on what I booked, but on what I collected.

You may say that if all were so severe in demanding pay, then many honest poor would suffer for want of a medical attendant. Not in these days of medical charities, free dispensaries, city-and county-physicians. The old long-credit plan should be abandoned. The idea of not sending a bill until six months or a year after rendering services, is not the way the world conducts business to-day. Demand pay promptly, while your services are fresh in your patron's memory. You will not then be exchanged for another doctor because your bill is not paid. When you have money dealings with a man you find out his true character. Have an understanding with strangers at your first visit. Never put off till to-morrow the taking of the fee. I do not mean to be too close in money matters; you must be very liberal and exercise great tact and judgment, and not be so vigorous in efforts to collect as to make enemies of would-be friends. I am speaking to those who are too modest to demand just dues. Great labor is necessary to look over accounts, drop bills, and to keep up a proper system of collecting. You should have a small book in your pocket so you can tell a patron at once the amount of his bill. In this way you will collect many dollars. You must have each delinquent's account at your tongue's end, just as you have each old lady's "sluggishness of the portal circulation." This can all be done by using the little scraps of time that the less diligent waste, and the less prosperous spend in hand-shaking, palaver and honey-fugling the street-loafers who never pay anything.

The demands of charity on our profession are very great. And we all have felt the reward of genuine charity work. But in our charity we must discriminate lest we encourage tramps and dead-beats.

There is just now a great outcry against the abuse of medical charities. No true physician will refuse to do genuine charity work, or to extend credit to the worthy poor. Someone has divided the poor into three classes: the Lord's poor, the devil's poor, and the poor devils. The first and last are worthy objects of charity. The less you have to do with the devil's poor the better you are off. Never doctor them to have their good will, or to have them say you are a good doctor. Sooner or later they will curse you. Give them to understand that your terms with them are cash. They will respect you, and when they get very sick will have money for you. We are all liable to get bad accounts, but no physician should allow the same party to repeat the offense.

Physicians should unite and form protective associations, and refuse to extend credit to any party found on the delinquent list, until the old accounts are settled. The greed for new patients of course will make this non-efficient in most communities.

Merchants in most of our cities are forming these associations for self-protection against defaulting and delinquent debtors. It is of great importance to join one of these, for their list and for their association letter. Many who are not collectable will pay rather than be on the black list. When a man has not enough pride or manhood left to answer one of these

letters, then his name should be published, and all those giving credit know him.

In extending credit to the honest poor you can make arrangements with them to pay so much a week or month. Also make them a present of most of your bill. You had better charge a poor man five dollars and get it, than twenty-five and get nothing. Or, what is still better, that there may be no cutting on fees, say "your bill is twenty-five dollars. I will make you a present of twenty dollars." Those who will not respond should be deprived of your services. No one can collect a bill so well as the doctor. Those who have very extensive business should have a collector.

My advice is to those who have large book accounts and little money: Be diligent and persistent, and recollect that it is of far more importance to collect an old account than to make a new one. If this advice is followed your book accounts will grow less, your bank account will grow larger, and you will use less "cuss" words when you review your books.

F. J. Groner, M. D.

Big Rapids, Mich.

Every man, whether merchant, mechanic, or wood-sawer, expects a doctor to pay his debts, and pay them promptly, and if he fails to do it, his reputation suffers, no matter how many hundreds or thousands are due him from bad-paying and unappreciative patrons for hard work and honest and efficient services rendered. The doctor that makes money is, other things being equal, the popular doctor, and the more he makes the more popular he is, for the average of people do not stop to enquire whether he is deservedly popular or not, but they are educated to the idea that the practice of medicine is a very remunerative business, and the doctor who fails to make money in his business, they naturally presume, is not deserving—has not the ability to make money, or he would make it. When these people, therefore, need a physician, they go for the man who invariably grinds the bill out of them, even if it takes the last quilt to pay for it; while the good-hearted, indulgent fellow, who is too easy and kind to even present a bill, never minds to press it, and takes no pay where he thinks people so poor that paying him would distress them, is left in his office with unpaid rent and seedy clothes, and ample time to cogitate on the mutability of all human affairs.

For the first twenty years of my more than a quarter of a century's practice, I followed the plan which long experience has caused me to regret, and under which I not only received little pay, but less thanks and often a bad name, and had I my time to go over, I would collect every bill that I could, in something, even if I gave it back directly or indirectly, in some other way; and the sooner a bill is collected after the services are rendered the better.

So far as the doctor is concerned, after fifteen to twenty years' experience, there is little more to him in treating a case without pay, than to the boy who shines your boots and fails to get the nickel. Really it is not in any great or alarming degree interesting to be called out, especially at night, or to a case of obstetrics, without a reasonable assurance of prompt pay. It has come to be my practice, when I am not acquainted with the caller, to inquire in a voice "child-like and bland," "how about the pay?" When I do this I rarely have any trouble, for the man who has it says, "that's all right, doctor, your money is ready," and those who are honest and will pay when they get it, say, "well, we haven't it just now, but will get it soon," or by some definite time. But in the case of those who get insulted, and go off in high dudgeon and get the other doctor, who is mealy-mouthed and secretly chuckles over his good fortune in profiting by my indiscretion, to find, when it is too late, that he has been the victim of misplaced confidence. I congratulate myself on escaping them.

The best way is to collect your bills, and never to let that little, mean ambition to run under your neighbor and take his practice, lure you to doing work for those who will not appreciate your labors any more than his. The refrain in cases secured in this way is, usually: "Oh, he did no good; she got worse all the time she took his medicine; I believe if she had taken another dose of his medicine it would have killed her; I will never pay him a cent." And the man who sneaks in and takes a case, where they refused or failed to pay his neighbor, deserves no better pay. Again I say, young doctor, collect your bills and be a gentleman. Be accounted a good doctor, and you are not annoyed with the class who can, and won't pay.

My clientele has come to be composed of just two classes: Those who do pay me, and those who are not able to pay any one—real objects of charity—though I will go to see the child, and, in some cases, the wife, of a man who has money to spend for whiskey, tobacco, fine clothes, and fast horses, but no money for me. But the man himself, in the latter case, would have to not only settle the old account, even of a brother-physician, and then pay in advance, or put something in pawn, before I would wait on him, even if he had cramp colic, and one teaspoonful of chloroform would relieve him, and chloroform only cost two cents a pound. Collect your bills, and take from the rich what you have to give to the poor.

W. A. Reese, M. D.

Eureka Springs, Ark.

My young friends, did it ever occur to you that a business man who is always prompt to meet his own obligations is generally equally so in collecting bills that may be due him? Pay your own bills promptly, or, if possible, make no bills, but pay for what you get or do without. You may be obliged to deny yourselves many things for a time, but once started, it will be easy, and if you owe no one you will never have it said of you as it is of the majority of the profession, "Let him wait, he always makes others wait."

Do you know that physicians, as a class, are considered by business men among their poorest paying customers? How often you hear it said of Dr. A. or B., "He is poor pay, but then he never asks anyone for his pay." Why not? Is not a doctor's bill just as fairly earned as a grocer's or a livery man's? Shame on all this twaddle about the purely professional part of our calling. Is not bread and butter just as necessary to our families as to the lawyer's or merchant's? Are we the only humane and charitable profession on the globe?

Let us drop a little of our senseless quarrelling over "ethics" and make ourselves a little less the laughing-stock of the rest of mankind. Let us pay our own debts and collect our bills just as business men do, and above all let us get down from our highly ethical, purely professional view of mundane affairs and grasp the situation like the merchant, farmer or manufacturer.

We are none of us above accepting our fees when offered. Is it any worse to ask for them within a reasonable time in a business-like manner, not cringing and afraid if we ask Mr. B. for our pay that he will never employ us again? Why should we care to retain his patronage if he don't pay? It isn't all fun to practice medicine. Experience won't pay storebills. The wagon manufacturer won't think of the ethical part of our profession when we need a new buggy to replace the one worn out in the service of the public. The horse-jockey will try just as hard to cheat us when we need a new horse to take old Jim's place as though we belonged to the "honorable" profession of barbers, or tailors or merchants.

In the six years of my practice I have never sued a man, and I think I can show as small a percentage of poor debts on my books as any physician with the same amount of practice, but I have made it a rule to pay my bills promptly and to call for pay for my own services like other business men. If anyone "kicks" I tell them plainly but firmly, I have a family to support and pay my bills, and to do this I must have pay for my services. If I find patients are dead-beats I get rid of them. I am busy when they come again, and direct them to the city-or town-physician, unless their case is urgent, in which case I always go as a matter of humanity. If a dead-beat undertakes to get into any altercation, I simply say "I have never asked you to employ me; probably there are other physicians who will gladly take your case."

If I find a patient destitute I attend to the termination of the case to the best of my ability, and then say, "I have no bill to make; if you are ever able you can come and pay me; if not, you are welcome to what I have done."

Physicians are largely to blame for their own financial conditions. "Those who are enabled by law to escape the payment of their debts" are obliged to buy meat, flour and clothing. Are we under greater obligations to them than the merchant? It is not necessary to be inhuman or grasping in order to collect just debts.

Make fees reasonable and then ask for them like men, with the consciousness of having fully and justly earned them.

Nine-tenths of all the fault found with physicians is by those who owe them; the patient who pays promptly rarely complains of the doctor.

Pay as you go, and "*Do unto others as you would be done by*" are just as good maxims for a physician to follow as any one else.

In conclusion, my friends, to use a Scriptural expression (I believe) life is too short to collect slow debts.

COUNTRY DOCTOR.

Rockford, Ill.

In an age when "money makes the man," every disciple of Aesculapius must pay attention to the business aspect of his profession, so that he may eventually be ranked with the "successful."

1. There ought to be a "Charity Organization Society" here, like that of New York city, the agents of which investigate all doubtful cases that apply for medical aid to the clinics and hospitals. Whenever a patient can afford to pay for medical advice he should be made to do so.

2. The specialists ought to confine their attention to the specialty which they practice, and the general practitioners of the city ought to assist them in making such practice remunerative. On the other hand, the specialist ought to reciprocate.

3. The old physicians of the city ought to charge larger fees.

4. Some system should be devised by means of which physicians might learn the names of persons indebted to fellow-practitioners for professional services, so that they can refuse to attend unless paid in advance, cases of necessity excepted.

5. Physicians should discontinue underbidding each other, especially as regards operations.

HUGO ERICHSEN, M. D.

DETROIT, MICH.

INTUBATION OF THE LARYNX A SUBSTITUTE FOR TRACHEOTOMY.

Is this procedure necessary? After thirty years' experience, and treating thousands of cases of croup, diphtheria, tonsilitis, and all other throat diseases, I positively say, no. Every case that has recovered through this topical application would have recovered without the bungling obstruction. This is a strong assertion in the face of the medical authorities.

How does nature cure or relieve herself? By cohesion, expulsion, rebellion. If you inflict a wound, she tries to heal by first intention, and if she fails, she then tries inflammation, suppuration and cleansing by expulsion.

In what kind of diathesis do we find pseudo-membranous croup, diphtheria, tonsilitis? In none other than scrofulous or syphilitic. In an epidemic, death comes to these, and only these; the remainder either are not attacked, or it is so slight they soon recover. Thousands of children never have croup or diphtheria. Why? They have but little scrofula (struma) or syphilitic virus. Thousands have died. Why? Because they have strumous or syphilitic natures. If you have an excess of these two viruses, or either of them, you will have croup, diphtheria, death. Why are such children more susceptible than others? They are a fertile soil, easily impressed, and ready to disease, bacilli, microbes, micrococci, or any of the other animalculæ. They are an absorbing sponge.

Why do these diseases attack the throat? After the system has become thoroughly impregnated with the viruses, nature tries to relieve herself in her natural ways. The throat being the exit to the internal system, has not space to throw off this poison as fast as it generates, being croupous in the throat, of an ichorous and plastic exudation, obstructs the outlet; then comes intubation, tracheotomy. Any treatment that will change these secretions and draw them off through another outlet, or outlets, will change the action of the disease. Can this be done? Certainly and surely. How? First, the throat and head must be guarded by compresses of cold water or ice, kept constantly applied. Second, three good tub-baths of warm water, five minutes each; increase temperature by more hot water, put to bed with blanket or comforter that was around patient while covered up; keep head and throat very cold; make the body very warm with bottles of hot water to feet, limbs and body. These baths should all be given in twelve hours, or oftener if the fever runs high; can be given every one, two or three hours. Three good, hot blanket-packs, keeping head and throat very cold, will do just as well; keep them in pack until system reacts. This process keeps the virus in the body until the disease is eliminated from the system, which will be in 24 to 30 hours. Do not fail to give small pieces of ice or sips of cold water, constantly. If the child is too small to use ice in the mouth (which should be held there until the mouth and throat dissolves it), a spoonful of cold water should be given often.

Medicine, which is auxiliary: Aconite, belladonna, ipecac — these used in equal parts of tincture, or alone. Five drops of the combination in a glass one-half full of water, of which give a teaspoonful often—say every half hour.

These thoughts will, perhaps, go to the waste-basket. All editors have a great aptness of pigeon-holing any communication that they think will be unpopular, but it is to be hoped the time is not far distant when common sense will take its place in treating human beings.

Let me suggest, in kindness, that the breeching be put on the old wheel-horses, to hold back those fiery steeds, saying, gentlemen, please go slow.

C. K. PATTERSON, M. D.

FORT SCOTT, KANSAS.

SYRUP TRIFOLIUM COMP. IN A CASE OF SYPHILIS.

Case of John H., German, æt. 32; contracted syphilis over 2 years ago. He had been treated by two other physicians. Dec. 1, '86, he was examined by me. Respirations were 28; mucous râles heard over the base of both lungs; temperature 102° at 11.30 A. M.; pulse 105. Both arms, from the wrists to the shoulders, red, swollen, and glistening with syphilitic erythema. Both tonsils ulcerated with scoop-like ulcers of cup shape and of copper color, and the surrounding tissue looking like raw beef. Both nostrils were occluded, compelling him to keep his mouth open for breath. Eyes red and congested. Inguinal glands swollen and tender, and the pain extending down both limbs, so that he could not walk. In addition to all this he had contracted gonorrhœa nine months before, and now had the gleet. Specific gravity of urine was 1007, loaded with albumen, mucus and pus, and of very offensive odor. It occurred to me that he would be a first-class case in which to test the virtue of the syr. of trifolium comp., and the result of the treatment is as follows:

Dec. 1. I took the smallest bougie and inserted into one of his nostrils, and I was able to reach the posterior portion of the passage, the act causing him to discharge a great quantity

of pus and some blood. I then took two ounces of the syrup and equal quantity of water, and took an old-fashioned syringe of piston and cylinder, and forced the fluid into the posterior parts, and the fluid returned by the same nostril, because the other was clogged the same way. I further put him on ʒ j doses of the syrup every two hours.

Dec. 2. I used the same local treatment, and had the same result with the other nostril. Afterwards injected 4 ℥ of syrup with the same quantity of water, in divided doses in fountain syringe, and inserted the nozzle in the one nostril and the fluid flowed out of the other. The ulcers in the throat were cleansed with ʒ i of the syrup to ℥ j of water, with good result. I subsequently painted the sores with the syrup, undiluted, and healthy granulations soon appeared, and to-day, Dec. 9th, the pulse is 78; temperature 98°; respirations 18. He can now breathe through his nostrils with his mouth closed. The sores are healed, appetite good, and induration of glands has disappeared.

D. A. LEWIS, M. D.

WHEELING, W. VA.

BINIODIDE OF MERCURY IN DIPHTHERIA AND SCARLATINA.

In the MEDICAL AGE of Dec. 10 there is an article on the use of Biniodide of Mercury in Diphtheria and Scarlet Fever. The author states that he had never known of its use in those diseases before he used it. In four years I have used it in more than eighty cases of diphtheria and never lost a case.

℞ Merc. biniodide, gr. j.
Sacch. pepsin, P. D. & Co., ʒ ij.

M. Ft. ch. no. xx.
Sig: One every two hours.

THOS. H. TURNER, M. D.

LARNED, KANSAS.

Among the many curious customs which prevail in Vienna, is one which has a direct bearing on the income to the general hospital, and through which a large sum is annually collected. Each householder who can afford the expense of a servant is bound by a contract to see to the health of his employee, and in case of sickness is responsible for the bill for medical attendance; if, however, he pays to the treasury of the hospital twelve florins a year for each servant, he is entitled in case of illness to send the patient to the hospital for treatment without further expense. But if he has not subscribed, and one of his servants enters the hospital, the authorities will collect from him the full amount of the fee.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JAN. 10, 1887.

Editorial.

SELF-ABUSE AND INSANITY.

A case of unusual local interest, and withal one which has peculiar points of interest for the medical profession, transpired in this city during the past week. A gentleman occupying the positions of Secretary of the Society for the Prevention of Cruelty to Animals, Superintendent of the News Boys' Home, and actively interested in measures having for their object the prevention of social impurity in our midst, was arrested a short time ago for indecent exposure of his person, the officers detailed for the arrest almost succeeding in catching him in *flagrante delictu*. Notwithstanding the evidence of his guilt was well-nigh unquestionable, such has been the gentleman's standing in the community that there were few who did not honestly believe that he was the victim of unfortunate coincidences, and that he was innocent of the bestiality charged. The matter was the subject of much discussion and such was the condition of public sentiment on the case that in the case of a trial before the Recorder, to whose court he had been bound over by the Police Justice, he would undoubtedly have been acquitted even in the face of the damaging evidence. Suddenly, however, all doubts were allayed by the public confession of the accused, in which confession he furthermore acknowledged that he had been guilty of the act for which he was arrested in numerous instances and in various parts of the city during the past year. Having subsequently pleaded guilty on his arraignment for trial, the judge, before passing sentence, desired the opinion of medical experts on the question of the prisoner's sanity. The case was referred to two local physicians, one of whom is known as having had experience in an insane asylum. The doctors, as occasionally happens, failed to agree, the insanity expert holding the prisoner to be insane within the accepted meaning of the term among experts, and the other holding that the "cussedness" did not deserve to be classed as insanity. Public opinion is as much divided on the subject as is the expressed opinion of the medical

gentlemen. To those who are disposed to believe the gentleman insane, the fact that he voluntarily admitted his guilt of a crime which must forever damn him in the eyes of the community, is regarded as conclusive evidence.

The history of the case in question is not sufficiently exact to form the basis of an opinion as to the connection with former vices and the present condition. There is, however, evidence to show that the unfortunate man was in his earlier years a masturbator, and although he is a married man and the father of a family the vicious habit, it is believed, still dominates him. The existence of such a condition as masturbational insanity is recognized by many alienists, and several of the symptoms which are held to be distinctive of this condition are found to be present in the case under consideration. The "masturbatory neurosis" is analogous to insanity, and predisposes to pronounced mental alienation. SKAE, as quoted by SPITZKA in a recent discussion before the New York Neurological Society, speaks of a peculiar imbecility and sly habits as characterizing the disorder in the youthful, and suspicion, fear, scared looks, palpitation and feeble bodies, as found in older victims, who gradually pass into dementia. In the condition resulting from this cause there is exaggerated self-feeling; conceited, shallow introspection; frothy emotional religious notions; and a restless, unsettled state, with foolish hatchings of philanthropic schemes. The confession of the subject of this notice, was accompanied by a demonstrative declaration of "conversion" and the responsibility for his peculiar conduct was laid at the door of the "devil," under whose dominion he felt himself to be helplessly held. In our opinion the prisoner should be detained for some time before being sentenced, in order that the possible, and probable, commencing mental disturbance may be given an opportunity to develop into marked aberration. It is scarcely credible that a man of good education, of previous exemplary conduct in both private and official life, and of good social standing, would be guilty of the acts charged against the prisoner unless some insane impulse controlled him.

PHYSICIANS' FEES.

This question is a peculiarly seasonable one at the beginning of the new year, and our readers will be much interested in the perusal of the symposium thereon which appears in our present issue. We are pleased to note such a unanimity of sentiment among the writers, and believe the advice contained in the several communications will strike the bulk of our readers as common sense and in harmony with the results of experience. The difficulty, however, will continue to lie in the inertia in the matter of looking after their finances, which is so characteristic of medical practitioners. In all the callings of life in which the stock in trade represents money which has been or is to be paid for the goods, sharp attention to collections is absolutely necessary to the success and continuance of the business. With the practitioner there is not the same incentive to collecting his dues, and in too many instances he is content, having no bills to pay for the stock of knowledge which he dispenses, to collect enough to pay the more immediate necessities of himself and family. Doctors certainly earn more money through their individual efforts than do the members of almost any other calling, and when a doctor combines good business capacity with professional attainments of a good order, he is, barring unavoidable misfortune, almost invariably found to be a "successful" man, in the accepted significance of the term.

We are much pleased to note the interest in the discussion of this most practical of subjects, and trust it may have a salutary educational effect on our readers. The first proof of this effect which will come to us will be the prompt payment by every subscriber, of his subscription to the MEDICAL AGE for 1887—a consummation devoutly to be wished.

Medical Progress.

THE THERAPEUTIC VALUE OF ERGOT.—DR. J. P. THOMAS publishes in the December, 1886, number of Progress an elaborate and instructive article on this subject, taking up very thoroughly, if not, indeed, exhaustively, the physiological action and therapeutical application of this important remedy, new uses for which in the treatment of disease are constantly being developed by the observations of therapeutists. We regret that the length of DR. THOMAS' article prevents its reproduction for our readers *in toto*.

Regarding the physiological action of ergot DR. THOMAS concludes that it possesses the power to act primarily upon the whole nervous, and especially upon the cerebro-spinal system, to such an extent that its prolonged use will so modify nervous action as to result in permanent tissue metamorphosis, by gradually diminishing the necessary supply of arterial blood for continued nutrition, lessening the caliber of the arterioles, and producing spasm of all involuntary muscles, and perhaps some voluntary, producing both tonic and clonic spasm and sometimes convulsions, and entirely arrest tissue nutrition, as in ergotic gangrene. It will diminish the growth of abnormal tissue, as shown in the successful treatment of fibroid tumors, etc.

With reference to its application in general practice the following formulæ are suggested :

In simple conjunctivitis (not specific) I have found no collyrium better than the following :

℞ Liquidi ergotæ (normal), ʒ ij.
Hydrastini, grs. v.
Aquæ destill, ℥ j.
M.

Often the hydrastin is omitted, and results are good. In some forms of ophthalmia, not specific, accompanied with excessive secretion, ether lachrymal or muco-purulent, it is almost a specific; of course, as is usually the case, when there is much pain some anodyne, as morphia, is added—more recently ʒ j of a 4-per-cent. sol. of cocaine.

In the summer complaints of children, more especially where the discharges are serous, while correcting the usual hepatic torpor with very minute doses of calomel, with sugar of milk, or pepsin, I usually prescribe the following, and with better results than any single prescription; often it acts like a charm, and such cases require no other medicinal treatment, only dietary treatment being necessary, as Carnrick's Sol. Food.

℞ Liquidi ergotæ (norm.), ℥ ss.
Tinct. belladonnæ, ʒ jss.
Tinct. opii camph., ʒ ij ad. ʒ iv.
Aq. menthæ,
Syr. limonis, ää ℥ ij.
M.

To a child one year and under two give one teaspoonful every two or three hours, unless the toxic effects of the belladonna are shown by flushed face, dry fauces, etc., when, of course, the dose must be lessened or the medicine discontinued until such symptoms pass off. When the discharges are green or other evidence of an excess of acid, ℈ij of bicarb. of soda is added to the above formula.

In many such cases ergot alone will often arrest the serous diarrhœa and produce consistent stools.

Hypodermically administered the following has never failed in my hands to arrest cholera morbus:

℞ Liquidi ergotæ, ♏xx.
Morphinæ sulph., gr. ¼.
Atropinæ sulph., gr. $\frac{1}{60}$ to $\frac{1}{40}$.
Aquæ, ♏x.
M.

This given subcutaneously at one injection has repeatedly put a stop to the constant vomiting and purging, and as promptly relieved the painful spasms of the gastrocnemii muscles, so characteristic of cholera morbus.

This single dose followed by from five to ten grains of calomel has been the only treatment I have found necessary in the majority of cases. Several cases I have found almost in collapse from excessive vomiting and purging, unable to retain a teaspoonful of anything in the stomach, not even ice, but after this injection, and in a very few minutes could take, with a relish, a plate of soup.

In a few cases after the excessive vomiting, purging, and cramping have ceased, there will continue a diarrhœa in such cases after the liver is aroused. I have found thirty drops of the liquid ergot, every two or three hours, competent alone to check it and produce consistent stools.

From an extensive experience with this formula in cholera morbus, I should be very much inclined to give it the first place in the treatment of Asiatic cholera, if called upon to treat this plague. I would have more confidence in the success of this combination with proper adjuvants—at least until tested by clinical experience—than any or all of the so-called germicides.

Notwithstanding the fashionable pathology of cholera, consisting of multiplied millions of "Comma Bacilli," and yet there is not a germicide so-called in the formula. My success in such cases has been such that it has become an aphorism with me that, *whenever there is an excessive serous discharge or secretion from an organ or mucous membrane, ergot is indicated.*

And I can truly say that, according to my experience it will disappoint the practitioner less frequently than any of the numerous astringents.

In pertussis, where the bronchial secretion is so abundant as to produce death by drowning, as it were, ergot is the remedy *par excellence.* I have seen its administration check the inordinate quantity of bronchial secretion almost magically, and am satisfied saved the lives of several little sufferers from actual suffocation.

But as an abortive of whooping cough I make no claims for ergot, neither do I think any has yet been discovered, notwithstanding the claims that have been advanced as such for belladonna; but as aids to nature in guiding it to a successful termination I have had more success with ergot and belladonna in the second and last stages, and carb. ammonia and quinia in the first, than with any other treatment.

A favorite formula, however, in any stage of this disease is:

℞ Liquidi ergotæ, ℥ ss.
Tr. belladonnæ, ʒ ij.
Ammonii carb., ℥ ss.
Aquæ,
Syrupi tolutani, ää ℥ ij.
M. Sig.—One teaspoonful, to a child 2 years and over, every three hours.

In the suffocative stage of capillary bronchitis I have long used as a sheet anchor the above prescription, but without the belladonna, and with satisfactory results.

In a paper published some years ago in the Virginia Medical Monthly, I extolled ammonia carb. in solution alone, in this distressing state of capillary bronchitis; but since that paper was published I have added the ergot, and am convinced it is a most valuable addition.

The ammonia seemed to be curative by its power as an expectorant and stimulant, thus enabling the child to throw off the excessive secretion, and in aiding oxidation of the blood, while the ergot actually lessens the amount of bronchial secretion by capillary contraction.

In that intractable and opprobrious disease to all known therapeusis—migraine, or sick headache—I have often been able to afford relief by ergot combined with some hypnotic, as cannabis indica or hyoscyamus.

Directing the sufferer to keep the liver sufficiently active, I most generally prescribe the following:

℞ Extract ergotæ, F., ℥ iss.
Extract cannabis ind., F., f. ℥ ss.
M. Sig.—From thirty to sixty drops every half-hour until relieved.

In those so-called constitutional cases of migraine, or in trifacial neuralgia, accompanied with anemia, no combination has produced better results than the following:

℞ Extracti ergotæ, ʒ ij;
Extracti hyoscyami,
Extracti cannabis indicæ,
Extracti nucis vomicæ, ää ℈ j;
Quininæ sulphatis, ʒ j;
Ferri hydrocyanatis, ʒ ss,
M.—Ft. pil. No. LX.
Sig.—One pill every three hours until relieved; then one before each meal, or every morning and night.

I believe as an internal remedy that ergot is considered the most reliable hemostatic known. In cases of acute dysentery, combined with other drugs indicated, it has, in my hands, proven of great service.

It is especially useful in those cases in which blood predominates in the discharges.

In several cases in my practice, where there was but little pain, after a saline cathartic, I found no other remedy necessary but fluid ext. of ergot in thirty- or forty-drop doses every two or three hours.

A favorite formula in the majority of cases (always prefacing the treatment by a full dose of sulphate of soda, which I prefer to the sulph. of magnesia, on account of its milder and yet more certain action) is the following:

℞ Extracti ergotæ, F., ℥ ij;
Mucilaginis acaciæ, ℥ iv;
Acidi carbolici, ʒ j;
Acidi sulphurici arom.,
Tincturæ opii, ää ʒ jss.
M. Sig.—One teaspoonful every two or three hours, according to the narcotic effect of the opium or the frequency of the discharges.

Of course in every case of dysentery where there is decided hepatic torpor mercury in very small doses is ordered, because bile is nature's healer of the inflamed or ulcerated mucous membrane in dysentery, and when "bilious stools" make their appearance the case is more hopeful, and a speedy convalescence may be expected.

In hemoptysis, uncomplicated with extreme anemia, the following formula will rarely fail to avert, at least for a time, the passive hemorrhages, or even check the more excessive pulmonary hemorrhages:

℞ Extracti ergotæ, F.,
Olei erigerontis,
Acidi sulphurici arom, ää ℥ j.
M. Sig.—From thirty to sixty drops in a wineglass of water as often as necessary.

In that singular disease hemophilia, or "bleeders," or hemorrhagic diathesis, the following has given better results than all other medication:

℞ Extracti ergotæ, F., ℥ ji;
Potassii chloratis, ʒ ij;
Tr. ferri chloridi, ℥ j;
Aquæ dest., ℥ xij.
M. Sig.—One tablespoonful three times a day, before meals.

This prescription, with lemon juice and an almost exclusively vegetable diet has succeeded in effecting a cure of one case of purpura hemorrhagica.

It will be found upon trial, perhaps, the best treatment in bridging women over the climacteric period.

After treating successfully, but painfully, several cases of internal hemorrhoids with injections of carbolic acid and glycerin, I have recently used Parke, Davis & Co.'s normal liquid ergot with marked success as to the obliteration of the tumors, and without so much suffering to the patient.

It is but justice, in this connection, to state that I have employed for the past year the normal liquid ergot of that enterprising Pharmaceutical House, Messrs. Parke, Davis & Co., in these formulæ, because it is non-irritating and always of uniform strength, and, therefore, preferable even to ergotine. The latter has seemed more irritating, and in my hands has always seemed inert.

I believe that one or more injections of ergot into different portions of all very vascular and soft internal hemorrhoidal tumors, will effect a cure, or at least render them comparatively painless.

In many cases of "skin-ulcer," or ulcers of long standing, that have resisted all other treatment, except, perhaps, skin grafting; ulcers in which the granulations are excessive —where the whole surface is a bright red—*i. e.*, the opposite of the indolent ulcer, I have had most excellent results from the constant application of the fluid ergot, which greatly reduced the granulations; and when this was accomplished, by the addition of liquid hydrastis candensis, and pinus canadensis, have effected a cure. The ergot was kept constantly applied by means of absorbent cotton saturated with it. Much must be absorbed, and its contraction of the capillaries of the part thus diminished tissue nutrition, the redundant granulations were reduced to a normal standard so to speak, and nature allowed to proceed with the healing process.

Where there is much pain in these old cases of skin ulcer, I have found that a leaf of common tobacco, kept constantly wet with the liquid ergot, lessens the pain and in some way aids the repair of the tissue, perhaps only by its anodyne properties.

My experience with ergot in the treatment of fibroids, is limited to three cases. Two were submural tumors of the uterus. After a prolonged treatment by ergot alone, both patients regained their usual health and flesh; one of the women has since become pregnant. and I delivered her of a healthy child. After extracting the placenta, which was adherent, the entire uterine wall was carefully examined, but I could detect no remains of a tumor. The third case, who is still under treatment, is a wonderful illustration of the property of ergot to arrest tissue nutrition.

In some obscure spinal trouble, I have found ergot beneficial in connection with strychnia, electricity, etc.

As an injection in gonorrhœa it has no equal, especially in those old cases that have resisted the usual treatment, with the normal fluid ergot of Parke, Davis & Co. and water equal parts. I have succeeded in curing several cases in persons who had been under treatment for weeks, using mercuric chloride, acetate of zinc, sulphate of zinc, aqueous solution of socotrine

aloes (which latter sometimes acts charmingly in the arrest of the discharge).

These and other injections, together with the copaiva compounds internally, had been used without success, when ten days' use of the ergot injections would produce a cure. Of course there are cases in which it, like every other treatment, will fail, and recourse to the cold sound will effect a cure.

The often untimely use of ergot in obstetrical practice can not be too often or too earnestly condemned. I may be an extremist on this subject, but in my opinion the case should be an exceptional one where it is not almost criminal to give it before the commencement of the third stage of labor.

In parturition ergot should never be given unless the os is fully dilated, or so relaxed as to be easily dilated, and even the external parts should not be rigid.

From considerable observation of its effects when used to produce abortion, I am firmly of the opinion that it exerts positively no effect upon this organ when not in action, and consequently the fear of producing abortion from its use, in medicinal doses, in pregnant women, where it is indicated for some pathological condition, is as groundless as that entertained by many practitioners, that there is danger of producing abortion by the free administration of quinine to women during gestation.

I have usually found the addition of small doses of ergot to other hypnotics, as fluid ext. viburnum, or a few drops of tr. opii, decidedly beneficial in the prevention of threatened abortion.

It is of course the main agent in all cases of chronic or habitual hemorrhage, from whatever source, nasal, urethral, vesical, intestinal, gastric, pulmonary, menorrhagic, metrorrhagic, and in purpura ergot is indicated; and when given in combination with other drugs to meet the complicating causes of the hemorrhage will always render good service.

When any form of chronic hemorrhage is accompanied by anemia, as of course nearly all are, a favorite formula is:

℞ Extracti ergotæ liquidi, ʒ ij;
Sodii chloridi, ʒ ss;
Tincturæ ferri chloridi, ʒ j;
Syrupi limonis, ʒ iv;
Aquæ destillatæ, ʒ xij.
M. Sig.—Tablespoonful three times a day.

In diabetes I have had better success with ergot and carbolic acid than any other medicinal treatment; of course the dietetic treatment is the essential feature in this disease. I have had no experience with the sulphide of lime, so highly recommended by Dr. Flint, Jr. I order one teaspoonful of liquid ergot with two (2) drops of carbolic acid before each regular meal.

In many cases of simple polyuria ergot alone will perform a cure, but where the case is of long standing, full doses of belladonna should be added.

Though ergot has been, from time to time, casually mentioned in medical literature as a remedy in epilepsy, no writer, as far as I remember, has seemed to consider it of much value. Upon general principles, in every epileptiform attack, we have an abnormal flow of blood to the head, and in this condition alone can the bromides prove of any benefit. I was led to try large doses of ergot in combination with the bromides and other hypnotics in four cases of epilepsy of very long standing. In all the cases the fits were very frequent, and very violent; and had resisted, for years, enormous quantities of the various bromides, variously combined and alternated

The results so far in four cases strongly incline me to hope that in ergot we have an agent that will add greatly to the value of the bromides in the treatment of this distressing malady.

Drumine—A New Local Anæsthetic.—The characteristics and properties of the euphorbiaceæ are so multiple and so different, that it is scarcely a matter of surprise to learn that one of the order has now been shown to yield an anæsthetice. Dr. John Reid, of Port Germein, South Australia, has recently obtained a local anæsthetic from euphorbia drummondii, and this drug, for want of a more convenient term, he calls drumine, until chemists give a better name. In his experiments he used the hydrochlorate, drumini chloridum, very soluble in water, and obtained in the following manner:

A tincture is made with rectified spirit (though he believes proof spirit would answer, especially if acidulated with hydrochloric acid). After standing a few days it is evaporated to get rid of the spirit, ammonia is added in excess, and the solution filtered. The residue, after the ammonia smell is gone, is dissolved in dilute hydrochloric acid, and the filtrate is filtered through animal charcoal to destroy the abundant coloring matter, which is inactive medicinally, but causes a bluish tinge of the skin. The filtrate is evaporated slowly, and leaves the alkaloid. It gives a colorless solution with little taste, almost insoluble in ether, freely soluble in chloroform and water, and depositing from solutions microscopic colorless acicular and stellate crystals, the latter being more numerous in the deposit from aqueous solutions. Roughly speaking, the length of the crystals is about one to twenty diameters of a white blood corpuscle (or from 4 to 260 mmm.). Those deposited from hydrochloric acid solution, are filtered through animal charcoal, are circular or boat-shaped at the circumference, and stellate, or perhaps more correctly, discs, as if formed of concentric circles, and with radiating or other fissures. Under high power the acicular crystals are sometimes of a rhomboid shape, and seem less soluble in chloroform; from which it may be suspected that there are two alkaloids, though Dr. Reid was unable to investigate this point.

Dr. Schomberg, of the Adelaide Botanical Gardens, who determined the species of the plant for Dr. Reid, states that many sheep and cattle are annually killed by eating it, and that it is more poisonous according to the quantity of milky juice which it contains. It is said that animals die within twenty-four hours to seven days after eating it, all being paralyzed in the extremities, and some hanging the head as though intoxicated, though the appetite does not seem to be impaired. It is also said that yellow eyes, and even jaundice, occur in some cases. Its most remarkable and valuable effect, however, is that of causing local

anæsthesia. When a few drops of a watery solution, estimated at 4 per cent., was dropped into the eye of a cat, the eye was found in a few minutes to be tolerant of contact with the finger, and the orbicularis muscle did not contract firmly as did the other. The pupil was not appreciably dilated. Three grains injected subcutaneously into the back had no other apparent effect than local anæsthesia. When DR. REID applied it to his tongue, nostrils and hand, very marked anæsthesia was produced; even the sense of taste for quinine was abolished on the side of the tongue to which it was applied. Small doses taken internally seemed to produce no constitutional effects. In a case of sciatica in an old man, in which he had tried iodide of potassium and ammonia, the first hypodermatic injection of 4 minims of a 4-per-cent. solution, enabled him to stand and walk in a short time with comparative ease, the pain having disappeared. A second injection, on the following day, acted as well, and at the time of writing the report the pain had not returned. DR. REID used it for cases of sprain, and the "speedy effect is probably sufficient to allow us to bid farewell to evaporating and lead lotions. I have seen it work like magic in a boy (boil?), the dose being the same, and injected over the adductors of the thigh. For tic I have dropped it into the eye and applied locally with success."

In regard to the physiological action of drumine: "Where death arose from an overdose of the drug, paralysis of the extremities occurred. * * and we may suppose that the posterior cornua of the cord (sensation) are primarily affected, the poison passing to contiguous parts. I am very much inclined to believe that reported cases of paralysis are neither more nor less than cases in which movements remain, but the sense relations with the external world exist to a very limited extent, while motion is still possible. * * It will be seen that strychnia, as an antidote, affects only the motor parts, while there is possibly an antagonism to a slight extent between chloroform and the drug. * * There seems to be no special action on the pupil, although the cornea is insensitive by local application. In no case have convulsions followed its use To sum up: Cocaine seems to have a mixed action, sensory and motor, to cause preliminary excitement—drumine is almost a pure sensory (no action on the pupil) paralyzer, without preliminary excitement; can be given with comparatively slight, if any, risk. A fungus is generated in the drug solution after some days. Its uses may be summed up as follows: Nerve troubles of a painful character, not due to a constantly exciting cause which remains potent, operations, irritation, œdema, sprains, and such like; but I believe there is a brilliant future for this drug in the domain of cerebral physiology on account of its almost purely topical action. For hydrophobia, and croup with spasms, it would be used fearlessly and applied either to the nostril, by spray, or with a very fine hypodermic needle into the larynx. Those daring spirits who inject antiseptics, *e. g.*, corrosive sublimate to the phthisical lung, will probably, in this drug, find a valuable adjunct. Let us hope, from its causing no preliminary excitement, it may be useful in peritoneal and bowel aliments of a painful nature, whether by hypodermic needle or by the mouth. Writer's cramp and its congeners appear to indicate its use." In cases of poisoning by it DR. REID would recommend Epsom or Glauber's salts alone, or combined with tartar emetic in small doses, with plenty of fresh food, in order to eliminate it and act antidotally.

Of course the correct interpretation of facts, on untrodden ground, with a limited supply of a drug, and without such apparatus for manufacture and experimentation as would be desired, is very difficult; and certainly no one would be inclined to quarrel with DR. REID for not telling us more about drumine—on the other hand, the world is his debtor, especially that portion of the medical world which is in the habit of making annual addresses, and which has been ringing the changes on cocaine for two years. Let us hope that, so long as they have no new facts to present, they will at least give part of their attention to drumine. DR. REID'S interesting paper may be found in the Australasian Medical Gazette, of October 15, 1886.—*Jour. Am. Med. Asso.*

THE BACILLUS OF MALARIA FOUND AT LAST.—At the conversational meeting of the Pathological Society of Philadelphia, November 3, DR. OSLER communicated the result of a study of the blood in over fifty cases of ague, and he, too, finds the bodies described by LAVERAN to be constant features. At the Washington meeting of the Association of American Physicians, if we remember rightly, DR. OSLER expressed himself rather doubtfully as to the nature of the bodies he had seen, but further study has evidently convinced him of their parasitic character. He described the bodies as occurring both inside the red corpuscles and free in the plasma. The intra-cellular form appears as either a hyaline or a darkly pigmented body, filling one-third or one-half of the corpuscle, and undergoes slow amœboid changes. The hæmoglabin of the corpuscle is gradually destroyed by the organism, and the stroma becomes pale and finally colorless. There seems to be no doubt whatever about the amœboid character of these movements, which are readily followed by a high-power objective. The forms occurring outside the corpuscle are still more remarkable. These are (1) small, circular, pigmented bodies; (2) curious, crescent-shaped organisms; and (3) an extraordinary flagellate body resembling an infusoria. The pigmented crescents have been noted by all observers, and are much more readily seen than the amœboid bodies. They do not occur so frequently, and apparently only in the latter stages of the disease. The flagellate form, also pigmented, is still less common, and was seen by the lecturer in only six cases. The movement of the flagella is very active, so that it brushes away the red corpuscles in its vicinity. The confirmation given by DR. OSLER, to the observations made by LAVERAN, MARCHIAFAVA, CELLI, GOLGI, STERNBERG, and COUNCILMAN, seems to settle the fact that we have found at last a micro-organism peculiar to malaria. This organism belongs probably to the flagellate infusoria. It is observed not only in the febrile paroxysm but in the intervals, and its presence is likely to be helpful in diagnosis; if we cannot yet say that it is the cause of the disease.—*Phila. Med. Times*

THE ANTISEPTIC TREATMENT OF PNEUMONIA—The widely-accepted view that acute lobar pneumonia is an infectious disease has stimulated some physicians to try and treat it antiseptically. PROFESSOR LEPINE, of Lyons, France, seems to have carried out this method most extensively, and he has recently reported his experience (Gazette des Hopitaux, No. 115, 1866). For a year he has treated his cases of pneumonia by pulmonary injections of an antiseptic liquid. He states that he has not lost a case, that in many instances the attack seemed shortened and the severity of the disease lessened. His method is as follows: He takes a long hypodermic needle and plunges it between the ribs over the centre of the hepatized lung, and carries it for about an inch into the diseased tissue. He then attaches a syringe and injects about twenty cubic centimetres (3 v.) of his disinfectant solution. He then withdraws the needle a little and thrusts it into a neighboring part and makes another injection. This process he repeats three or four times, until the hepatized lung has been saturated with two or at most three ounces of the antiseptic fluid. The operation causes a little cough, and sometimes a temporary bloody expectoration. The only marked inconvenience is the pain caused by the puncture. The solutions used have been the benzoate of sodium, which LEPINE now discards; the iodide of potassium in concentrated solution, and bichloride of mercury in solution not stronger than 1 to 40,000.

PROF. LEPINE claims to have established an interesting fact in this connection, viz., that a mixture of antiseptic solutions is stronger than any of the agents singly. Thus, a mixture is made of bichloride of mercury, 1 to 100,000; salicylic acid, 1 to 1,000; carbolic acid, 1 to 1,000; benzoic acid, 1 to 500; chloride of lime, 1 to 5,000; bromine, 1 to 10,000; hydrobromate of quinine, 1 to 2,000; chloroform, 1 to 2,000. This, when mixed with equal parts of bouillon containing *bacillus subtilis*, arrests the growth of that organism, while no one of the constituents used alone will do it. LEPINE finds that this solution injected into the lungs of dogs does not cause any irritation, and he proposes, therefore, to use it on man.—*Ibid.*

HYPNOTIC PROPERTIES OF BOLDO-GLUCINE.—DR. RENE JURANVILLE, of Paris, has published as a graduation thesis an account of some experiments and observations on boldo-glucine, an aromatic substance of the nature of a glucoside, obtained by M. CHAPOTEAUT from the leaves of the pneumus boldus, or boldo fragrans, a plant belonging to the mominiaceæ, which has from time immemorial been employed by the natives of Bolivia, Chili, and Peru, in hepatic diseases. The boldo-glucine used by M. JURANVILLE is not the same substance as boldine, which is an alkaloid existing in very small quantity in the leaves, and which was isolated in 1874 by MM. CL. VERNE and BOURGOIN. The observations were directed to the hypnotic action of the glucoside, and were conducted on both animals and human subjects. Dogs were sent to sleep by intravenous injections of boldo-glucine, in quantities of from two to seven grammes. Observations were taken and curves constructed, howing that during the sleep produced the cardiac beats increased in rapidity, while the amplitude of the pulsations diminished; the arterial pressure was not affected. M. JURANVILLE also gathered from his observations that anæmia of the brain was produced. His therapeutic researches were conducted on insane patients, the doses given being from 22.5 grains to 2 drachms, the substance being enclosed in gelatin capsules or introduced by means of enemata. It was not found easy to administer it in the form of draughts on account of the powerful odor. It gave rise to no disagreeable symptoms, and, indeed, appeared to stimulate the appetite and the digestive functions. The hypnotic effect was very definite, ten patients on whom it was tried being all sent too sleep, and in some cases their hallucinations being removed; the effect was not, however, permanent, the sleeplessness and hallucinations returning on the cessation of the treatment. M. JURANVILLE concludes that though boldo is not a perfect hypnotic, it is likely to prove valuable in cases of neurotic or maniacal insomnia when other drugs have been tried without effect. Further study of its action is, of course, required before any very decided opinion as to its efficacy can be expressed.—*London Lancet.*

AS TO THE EFFICACY OF COCA PREPARATIONS.—I desire to state for the benefit of my colleagues the results which I have obtained during my long career as military surgeon by the use of *Vin Coca Mariani*. Briefly stated, I have used it with the greatest success in profound anæmia, resulting from long arduous campaigns in tropical countries, and in the gastro-intestinal irritation with loss of appetite and dyspepsia, which is such a frequent accompaniment of this condition. Two or three wine-glasses each day relieve the debility with wonderful rapidity, inasmuch as the tolerance of the stomach for nourishing food and the appetite were restored by its administration. Mariani's wine is vastly superior to the wine of quinia, since the latter by augmenting the gastro-intestinal irritation interferes with alimentation, and consequently with repair, thereby aggravating the anæmia instead of ameliorating it.

I have also employed it in those cases of chronic alcoholism, fortunately rare in the French army, which follow the abuse of absinthe and strong liquors. This wine, while producing primarily a certain amount of cerebral stimulation, exercised a predominant sedative effect upon the nervous system. I have, moreover, witnessed the spectacle of hardened drunkards giving up their pernicious habits and returning to a normal condition under the influence of this wine.

I have also employed it successfully in the treatment of the tobacco habit. A few glasses of the wine, taken in small swallows or mixed with water, were sufficient to replace both pipes and cigars, since the patients obtained the cerebral stimulation which they sought for, albeit unconsciously.

I have also employed it in chronic bronchitis, and even in pulmonary phthisis. It augments the appetite and diminishes the cough in both these conditions. When combating the cough I have given it mixed with water, a wine-glass of the wine to a tumbler of spring water.

Finally, I have employed it in the convalescence following typhoid fever with the greatest success, and this in cases where the irritability of the stomach was so great that no wine, not even Bordeaux, could be tolerated.—H. LIEBERMANN, M. D., in the *N. Y. Med. Monthly*, Oct., 1886.

JEQUIRITY IN THE TREATMENT OF CHRONIC GRANULAR METRITIS.—B. reports only one case, but the result obtained is so marked in consideration of the obstinate trouble that further experiments with jequirity will doubtless be made. Patient suffered during three years and an objective examination gave the following results: Vulva and vagina were hyperæmic; very sensitive; uterus enlarged and sensitive against touch. The collum uteri, swollen, congested, covered with fine granulations. The introduction of the sound proved painful, caused bleeding easily, and showed an enlarged cavity.

After the vagina and the collum uteri had been cleaned with sulpho-carbolate of zinc (5 per cent.) a small Braun's syringe with a 1-per-cent. solution of jequirity was injected into the uterine cavity and immediately afterwards drawn out again. Then the collum uteri was painted three times with the same solution.

The patient to whom absolute rest had been advised did not follow instructions and walked a great deal; began to suffer in about twelve hours later of cold; had severe uterine pains. The thermometer showed 38 degrees C., and rose on the next day to 39.2 degrees; fell on the fifth day to 38.1 degrees, and then remained normal. During this time the severe pains which forced the patient to remain in bed continued, and decreased only after about a week.

At first there was no secretion from the vagina; later on a catarrhal secretion and pieces of membranous tissue were ejected. After ten days the collum uteri had decreased in size; was of a rose color, not any more bluish, and instead of being covered with granulations, it was now covered with a young epithelium.

The sound could be introduced without pain and without bleeding; the orificium externum was covered with mucus. The uterine cavity was normal. Twenty-four days after the application of the jequirity solution menstruation appeared for the first time in years without pain, a normal quantity, and has remained so ever since. Nutrition has improved and the nervous troubles have disappeared.—DR. LUIGI BORDÉ, in the *Deutsche Medicinal Zeitung*, Nov. 8, 1886.

MUTISIA VICIÆFOLIA IN THE TREATMENT OF CONSUMPTION.—DR. ANDRES MUÑOZ, in La Cronica Medica, gives a description and analysis of mutisia viciæfolia, which has been lately attracting much attention as a cure for consumption. The plant is popularly known in Peru and Bolivia, where it grows in mountainous regions, as chinchircoma.

Mutisia is a shrub of the family of compositæ, order labiatiflores. It is propagated most readily by means of suckers and stolons, as the seeds are very scarce, only about thirty having been obtained from over two hundred flowers. The flowers, when dried, weigh about forty grains each.

The active principle seems to reside in a bitter resin and a bitter principle, which compose less than two per cent. of the flower.

In the Journal de Hygiene, of Paris, September 9, 1886, appears a communication from DR. CH. NAUDIN, directed to Secretary-General of the French Hygienic Society, in regard to this plant.

"I do not know," says DR. NAUDIN, "whether you have heard of mutisia viciæfolia, a Bolivian plant, in regard to which DR. SAAC, for many years established in Cochabamba, calls the attention of physicians. In his first communication, directed, some months since, to the National Society of Agriculture, we are informed that this mutisia has enjoyed from time immemorial, among the Indians, the reputation of being a radical cure for phthisis, and also a majority of the diseases of the respiratory passages. The Indians made a secret of this remedy, but DR. SAAC, by means of presents and kindnesses, has succeeded in inducing them to reveal it to him. According to his statement, the reputation of the remedy is not exaggerated, and he is so fully convinced of its efficacy in phthisis, that he has no doubt it will have a greater future in therapeutics than quinine itself."

DR. SAAC has sent a quantity of the extract of mutisia to the London and Paris hospitals, and seeds have been sent to Paris and Algeria. *Am. Pract. and News.*

NITRO-GLYCERIN IN COLLAPSE.—A remarkable case of resuscitation from apparent death by the hypodermic injection of a one-per-cent. solution of nitro-glycerin is reported. The patient is said to have been pulseless, and rigor mortis is reported to have already set in. Of course a single case, and especially one that may have been simply hysterical, counts for little, but to the experienced observer in the use of this powerful remedy it opens a new and somewhat wide field for investigation. Naturally the use of this agent is suggested in all cases of collapse, and particularly in that from the effect of anæsthetics and from the shock of surgical operations. It doubtless will be tried under a variety of circumstances, and we shall soon know whether we have in this an agent of such wonderful power as appears to some.

The physiological effect of nitro-glycerin is profoundly upon the vaso-motor nerve centers, and by some claimed to be limited to this sphere, and all its other phenomena as supposed to be in consequence of this action. We have administered a single drop of a one-per-cent. solution to susceptible persons with tremendous effects, so that the patient was frightened by the severity.

Nitro-glycerin is being employed largely now in various affections which tend to collapse, such as angina pectoris, some forms of nephritis, and is being studied more closely than ever. The time was when its use was confined chiefly to the flushing headaches which come at the meno-pause and at other times, but it has been found useful in cases of acute nasal catarrh, in affections from over-indulgence in alcoholic stimulants, as well as in a variety of other affections. We are confident the remedy

will find a large place in our therapeutic armamentarium.—*N. Y. Med. Times.*

LOCAL APPLICATIONS IN VAGINITIS.—SLOCUM has recently, in the Medical News, called attention to a communication upon the use of vaginal tampons of absorbent cotton "coated with boracic acid" in the treatment of profuse and offensive leucorrhœa, a method which he prefers to the use of boroglyceride cotton tampons, because the glycerin causes a copious watery discharge which, though at times beneficial, is not always desirable. At the Jefferson Medical College Hospital boric acid has been used in the treatment of vaginitis with very satisfactory results. A large cylindrical tampon with a string attached to it, is covered with glycerin and then thoroughly coated with boric acid sprinkled from an ordinary pepper-box. It is allowed to remain in the vagina for forty-eight hours.

DELINEAU, in the Révue Médico-Chirurgicale des Maladies des Femmes, for October, advises, in vaginitis, the use of a powder composed of salicylic acid three parts, powder of poplar charcoal five parts, and powdered talc ten parts, applied by an insufflator to the entire vaginal surface.

We find in the same number of the Révue the following method of preparing salicylated cotton, which may also be used not only for uterine, but also for vaginal application. One hundred parts each of concentrated alcohol and of purified cotton, ten of salicylic acid, and one of glycerin are provided. The salicylic acid is dissolved in the alcohol, the glycerin added, and then the cotton is saturated in the mixture, the superfluous fluid squeezed out, and the cotton dried and kept in hermetically sealed flasks.—*Medical News.*

ON THE HYPODERMIC USE OF IODIDE OF SODIUM.—DR. ARCARI, of Mailand, as we learn from the Wien. Med. Woch., No. 4, 1886, is in the habit of applying iodide of sodium hypodermically in cases in which the internal use of the drug has to be suspended on account of resulting gastric irritation. He makes two injections daily, the dose ranging from four to fifteen grains.

The results obtained by ARCARI in syphilis with the hypodermic employment of iodide of sodium were quite as satisfactory as with any other mode of treatment. The quantitative examination of the urine revealed that in the cases showing favorable results of treatment, the elimination of iodine proceeded slowly and scantily, while in the cases with negative results this elimination was quick and ample. This fact led ARCARI to conclude that in the latter cases larger doses had to be given for a long time in order to obtain even here favorable results. To prevent an undue burdening and irritation of the alimentary channel, the alternate internal and hypodermic application suggests itself wherever large doses of the iodine salt are required.—*Ther. Gaz.*

A NOVEL TREATMENT OF PHTHISIS.—DR BERGEON, of Lyons, recommends a method of treating phthisis which has, at any rate, the merit of novelty. His plan is to utilize the effects of sulphuretted hydrogen, and this he proposes to do by injecting carbonic acid gas, saturated with sulphuretted hydrogen, into the intestines. If care be taken to secure the absence of atmospheric air, no inconvenience, it is said, results from the injection even of large quantities of the mixture, absorption into the venous system and elimination by the lungs taking place very rapidly. It is claimed for this procedure that, by its means, the use of sulphuretted hydrogen is unattended with any toxic effects, and exerts its influence directly on the lungs themselves. It has been employed in a number of cases at the hospitals of Lyons, Bordeaux, and Paris with great benefit to the patients, even in very advanced cases, and, latterly, similar observations have been made in the consumption hospitals of London, the results of which have not yet been made known. The method has been very much simplified by the introduction of an ingenious but simple apparatus whereby the carbonic acid gas is generated, and saturated with sulphuretted hydrogen, ready for use.—*British Medical Journal*, November 27, 1886.

NAPHTHALINE IN URINARY DISEASES.—Naphthaline, which has been used to disinfect the stools, has also the property of retarding the putrefaction of the urine, and may therefore be administered for cases of urinary disorder in which the urine has a fetid odor. Daily doses of one gramme and a half of naphthaline in cases of pyelo-nephritis, cystitis, chronic prostatitis, and stricture with fistulæ, have rendered the urine sweet in from two to five days. The urine, from being turbid, purulent, and alkaline, becomes neutral or acid, and the quantity of pus is diminished. No disorder has been noted in the digestive processes. The drug does not augment the frequency of micturition.—*London Lancet.*

THE ACTION OF PYRIDINE IN ASTHMA.—Pyridine is, according to the Union Médicale, valuable as an anti-asthmatic, whether the affection is of cardiac origin or otherwise. About a drachm of the drug is placed on a plate in a small room, to which the patient pays periodical visits of from twenty to thirty minutes' duration three times a day. After two or three séances the râles in the chest disappear, the expectoration is more free, and sleep is obtained at night, or at all events relief from the asthmatic attacks. In some cases the improvement is permanent, in others it only lasts unimpaired for five or six days. Iodine treatment is then required, which is usually efficacious, but which cannot be borne by all patients.

A POWERFUL DRUG.—A solution of strophanthin, one part to 10,000 of water, brought in contact with a frog's heart, will stop it in twenty minutes.—*Med. Rec.*

The Medical Age.

Vol. V. DETROIT, JAN. 25, 1887. No. 2.

Original Articles.

ABSCESSES WHICH OCCUR AFTER ABDOMINAL SECTION.

BY THEO. A. McGRAW, M. D., OF DETROIT, MICH.

The typical ovariotomy is one which has been conducted with a perfect asepsis. The experience of European surgeons has demonstrated the possibility of obtaining a perfect asepsis by the expenditure of sufficient money, labor and time, and the general proposition may be advanced, with theoretical propriety, that no abdominal section should be made until the proper conditions for assured success have been obtained.

Unfortunately, however, the believer in antiseptic surgery has practically to contend with many difficulties, which render it impossible, as yet, for him to accomplish his purpose to his full satisfaction. The profession itself is, unfortunately, not yet a unit, in this country at least, in respect to the doctrines of antiseptic surgery, and the specialist has often to encounter, not opposition, but something worse than opposition—the consent of an unbeliever to the adoption of the necessary measures. The surgeon, therefore, sometimes finds himself thwarted by the very physicians who have invited him to operate, and has always to encounter that prejudice which makes a patient desire to be operated on in her own home, rather than go to a sanitarium, whose rooms, made aseptic, it may be at great expense, are, nevertheless, strange and forbidding. Especially is it difficult to obtain the conditions of success in asepsis in a crowded general hospital. This is the universal experience, even where the government has provided means to employ a superabundance of labor; but when, as with the hospitals of our own city, the institution is unaided by the State, and cramped in its pecuniary resources, the difficulties are enormously increased. That which, more than any other one thing, cripples our existing institutions, is the vice, peculiar to Americans, of neglecting the hospitals which are established, while squandering the charity of the public in the erection of new and unnecessary institutions. The hospitals are, therefore, not able to furnish the means which alone can make them absolutely aseptic, and the surgeon has often to be content with imperfect results.

It becomes necessary, therefore, however much we may deplore it, to learn how to treat the septic conditions which are sometimes met with after operations on the abdomen.

When, after an abdominal section, septic poisoning results, it may run one of two courses. It may either kill quickly by means of a general infection, or it may cause local abscesses which develop slowly, and are usually amenable to treatment. In the first instance the patient, immediately after the operation, begins a vomiting, which never ceases, of bilious and dark-colored fluids. The abdomen at the same time becomes swollen, and the countenance assumes a yellowish hue and anxious expression. The amount of pain varies with different cases, but ordinarily is not very severe. The pulse runs up to 110 or 120 in the minute, and the temperature varies from 101° to 104° F. Something may be done in these cases by opening the mouth of the wound and irrigating the abdomen, and sometimes after entering the valley of the shadow of death, the patient may triumph over the malady by the innate power of the constitution. As a rule, however, these cases die in a very few days, from the effects of the poison. It is far different with the class of cases in which the effect at asepsis has been partially, but not completely, successful. In such cases there may be a failure to achieve surgical cleanliness in just one little point. The quantity of morbid germinal material is small, and requires time for its development into an active virus. The symptoms which supervene will then show themselves more gradually, and with less severity. The stomach, at first irritable, becomes settled, and vomiting ceases. The abdomen is moderately bloated and sore. The pulse runs from 90 to 100 per minute, and the temperature from 99°F. or 100°F. in the morning to 101° or 102° in the evening. In the course of a few days the symptoms may have so far subsided as to make the unwary surgeon expect a rapid convalescence, but a little undue tension of the pulse, and a pulse rapidity a little above the normal, a temperature, not high, but never quite normal, a physical lassitude and a lack of appetite, which is not natural to a convalescent, and a still remaining slight soreness in the neighborhood of the abdominal wound, show that there still remains, somewhere in the abdomen, a focus of irritation. I wish here to express my conviction as to the great value of a slight rise of temperature as an index of sup-

puration after laparotomy. In my earlier experiences I was prone to look upon a temperature varying from 99°F. to 100°F. or 100½°, or 101° as due to other causes than those of septic nature, such as malarial poisoning, indigestion, and the like. I have learned differently, and I know now that, as a rule, whatever exceptions may occur, a *continued* rise of temperature, of even half a degree or a degree, means a failure in the asepsis, and in general the virulence of the septic poisoning is in proportion to the height to which the mercury rises. The lower elevations, up to 102° F., most frequently denote the existence of a circumscribed abscess, while the higher grades are more apt to show a general infection. In my earlier experiences I used to attribute many rapid deaths to shock, but I have become convinced that SIMS was right when he attributed, with very few exceptions, all such deaths to septic poisoning. A high temperature of the body and the existence of any great amount of shock are, in my opinion, incompatible.

In fact, a death after abdominal section from any other cause than septic poisoning is a rarity.

Four cases of suppuration after laparotomy which I have had this year in my own practice, will illustrate some points both of diagnosis and treatment:

Mrs. S., a married woman of twenty-nine years of age, and the mother of two children, had for several months been subject to severe attacks of pain in the region of the left ovary. DR. WALSH, who was finally called in to see her, recognized a tumefaction above the pelvic roof to the left of the uterus, and advised her to put herself in my hands for operative treatment. I opened the abdomen on April 13th, 1886, and found a globular swelling as large as a small orange situated immediately under the left ovary but separated by a free space from the vaginal roof. It broke while handling and discharged its contents into the abdomen. It was an abscess in the folds of the broad ligament, and the ovary formed its upper wall. I extirpated the sac of the abscess and the ovary and cleansed the abdomen as thoroughly as possible before closing the wound. For the first seven days she had a fever with a temperature running from 100° F. to 102° F. Her abdomen was never swollen nor her stomach irritable. At the end of a week her temperature fell to normal and she felt well, only a slight soreness in the lower part of the abdomen remaining to remind her that she was not yet quite herself. I allowed her to sit up on the eighteenth day. This change of posture was followed immediately by a rise in temperature to the old height and an increased pain in the abdomen. In a few days there was plainly to be felt a hard swelling below the lower end of the wound. This continued to increase in bulk until a bimanual examination showed that it extended from the pedicle to the wound. On May 6th I opened it carefully and evacuated a quantity of thick pus without opening the abdominal cavity. Free drainage led then to a speedy cure, but a subsequent rupture showed that healing by suppuration is never so good as by first intention.

The second case was that of Mrs. Hall, of Tomkins, Mich., a patient of DR. HYNDEMAN'S. She had had two children, and had carried a tumor in her abdomen for over six years. Nine weeks before coming to the city she had experienced a sudden pain on making some unusual exertion, and this had been followed by a sharp inflammation of the bowels, which on her admission were still sore.

Her tumor had a peculiar shape, projecting from the centre of the abdomen and leaving the loins flat and unoccupied. It reached a height midway between the navel and ensiform process. The operation on Sept. 23d, 1886, revealed a multilocular cyst of dark color with a twisted pedicle. The surface of the cyst was made very adherent by recent adhesions.

For some reason, the efforts to secure asepsis failed and the operation was followed by an immediate rise of temperature. For two weeks it ranged from 100° F. in the morning to 102° in the evening, but at the expiration of that time, simultaneous with an increased abdominal soreness the mercury rose to 103°. Putting her under an anæsthetic, I opened a large abscess in Douglas' pouch and another at the upper end of the wound. During the next ten days the temperature fell but did not reach the normal, and an induration making its appearance in the abdomen below the lower end of the wound, I cautiously opened it by cutting down to the peritoneum and pushing my finger into the tumefaction. This took place on the 25th day. A gush of dark-colored pus followed my finger out, and nothing more at that time, but when I visited her on the following morning, I found bandages and bed wet through with a thin feculent discharge. Whether I had torn the bowel with my finger, or whether it had ulcerated through, I cannot say. I stuffed the sinus leading to the bowel with dry, non-absorbent cotton batting, and had the satisfaction of seeing the discharge completely controlled. Her convalescence proceeded without further interruption; she left the hospital on the 38th day, and wrote me shortly afterwards that her sinuses had all healed, and that she was perfectly well.

The 3d case was that of Mrs. Baird, of ———, Ont., a patient of DR. BULBIS', who entered St. Mary's Hospital on Nov. 26th, 1886. She had a small intraligamentous ovarian tumor of the right side, with an enormous amount of ascites. She had borne one child, but her abdominal walls were rigid, and the operation, on account

of the deep position of the cyst, was very difficult. The operation was performed on Nov. 26th, 1886, Drs. Bulbis and Kitson, of Ontario, and other medical gentlemen being present. There was no pedicle, and it was necessary to dissect the cyst from out of the broad ligament. The rent in the peritoneum was sewed up, and hemorrhage checked, by carrying the thread around the bleeding vessels. For five days the woman had hardly a rise of temperature, and then there began that gradual ascent of the mercury, which I have learned to regard, when occurring after laparotomy, as the forerunner of an abscess. Beginning at 99° F. in the morning, and 100° in the evening, it gradually reached a height in the morning of 101° and in the evening of 102½°. At the same time the lower part of the abdomen became more tender, and a hard swelling could be detected at the site of the wound in the broad ligament, by vaginal examination. On the eleventh day, the induration connected the abdominal scar (for the wound had healed by first intention) with the pelvic roof, and I proceeded to open the abscess, by cutting through the lower end of the original cut, and then forcing my finger gradually through the inflammatory mass, until it came to the abscess cavity deep in the abdomen. A drainage tube was inserted and the sinus washed out twice daily. Instead of improving, however, the patient seemed worse, and her temperature arose on the same day to 103° F.

There was little improvement for a week, but at the end of that time a gush of matter through the drainage tube denoted the discharge of a new abscess. Introducing now a long probe into the sinus, I was enabled to carry it to a distance of eight inches, down towards the rectum. A temporary improvement followed, but a continuous slight rise of temperature of one or two degrees showed that the drainage was not yet perfect, and a growing tumefaction in Douglas' pouch made it plain that a counter opening must be made in the posterior vaginal wall. This I did on Jan. 2d, 1887. The temperature then fell permanently, and the patient convalesced without further drawback.

Case 4.—Maggie McMahon, aged 24, was shot in the abdomen, at three o'clock on Tuesday morning, Dec. 14, 1886. She was carried to St. Mary's Hospital at half-past eight o'clock, and I saw her at nine o'clock on the same morning. I found her vomiting bile, and complaining of great pain. Her pulse was 120 per minute, her respiration 30, and her temperature 102° F. The bowels were moderately bloated and very tender, and two inches above and two inches inside of the right anterior superior spine of the ilium there was a gun-shot wound with black edges. It was supposed to have been made by a ball from a revolver of 32 calibre, although that point was never fairly settled. At twelve o'clock, noon, I cut through the abdominal walls at the site of the wound, by making an incision of four inches long in the direction of the fibres of the external oblique muscle, the wound being in the centre of the incision. It was easy to trace the wound into the abdominal cavity by the discoloration of tissues, and it soon became evident that the ball had passed from before backwards, and from above downwards, into the peritoneal sac. My finger, on entering the cavity, immediately detected a hole on the anterior surface of the ascending colon, which I thereupon drew out on to the abdomen. This wound, from which fæcal matter was constantly pouring, was an oval with its long axis transverse to that of the intestine. It was about half an inch long and a quarter of an inch wide. I sewed it up with a continuous suture of cat gut, in a double row, after Czerney's modification of Lembert's method. Searching then for the wound of exit, I found it also vomiting fæces directly behind at the junction of the meso-colon with the intestine. The meso-colon and meso-cæcum in this case were long as the peritoneum, completely surrounded the gut. The ileum was united to the intestine on its inner and posterior surface midway between the two wounds. The second wound had its long axis also transverse to that of the bowel, and was sewed together in the same same way as the first. This done, I was able to trace the track of the bullet down into the femoral canal below the external iliac and femoral artery, by a ragged opening in the muscle, but its course afterwards is a matter of great uncertainty. The abdominal cavity was washed out and closed with wire sutures, and a drainage tube inserted. The patient began immediately to improve, and her temperature fell a degree on the same day; she vomited less frequently, and the ejecta contained only mucus and swallowed fluids. Her pulse fell to 100, but her temperature rose again on the second and third days to 102°. After the third day the improvement was more marked, and after the sixth day she ceased altogether to vomit, and her temperature fell to 99° and 100°. The drainage tube was then withdrawn, without having discharged one drop of pus. Now, the point of the case which is interesting in this connection is this: Although the patient seemed to be improving every day, I was, nevertheless, rendered uneasy by the fact that her temperature never quite reached the normal, and on the tenth day about a teaspoonful of pus discharged through the wound.

There are many other interesting points in the history of this case which I shall write out at length when the patient is fully recovered, but I wish to speak of it here as an example of the value of thermometric observations in the

detection of abscesses which follow laparotomies. In this case the abscess was superficial and did not materially interfere with the progress of the patient towards recovery, but it, nevertheless, prevented the mercury from sinking to the normal. I should therefore say, that a very high temperature after abdominal section, viz. one above 102°, means general septic poisoning; that an abnormally high temperature of less than 102° may also indicate a general infection during the first four days after the operation, but if it continues longer than that without getting higher, or if it even falls one or two degrees but does not reach the normal, then the probability of an abscess forming is very great. It is wonderful how large an abscess may become in the abdominal cavity without causing a thermometric rise of more than one or two degrees.

Some two months ago DR. SHERMAN, of this city, called me to see a lady of about fifty years of age in consultation. She had several days before been seized with a severe pain in the right iliac region and had developed some alarming symptoms and especially a variable and feeble pulse. When I first saw her she had a pulse of 110 and a temperature of less than a hundred. Her stomach was not especially irritable, and her bowels had moved. Her abdomen was, however, quite tympanitic and there was a tenderness in the right iliac region, She seemed to get better under treatment; her pulse grew more regular and her temperature fell for several days down to normal. I was called again one week afterwards on account of an alarming weakness of the pulse, which at one time fell to 60 in the minute and at another shortly afterwards arose to 120. There seemed to be no particular change in the other symptoms except that she was evidently weaker and inclined to perspire freely. Her temperature then was 101°, but on the next morning had fallen again to 100°. Although she had complained of no pelvic trouble whatever, I nevertheless examined by the vagina in order to discover if possible the cause of the evident constitutional depression. I found an enormous fluctuating swelling in Douglas' pouch, and on the following morning after giving the patient an anæsthetic, assisted by DRS. SHERMAN, BOICE and BIGGAR, I cut freely into it and evacuated about a quart of most horribly stinking matter—and yet with all this cause for septic poisoning the temperature of this patient during her whole sickness only once or twice rose above 100° F.

I feel justified therefore in saying that the surgeon who neglects to notice slight rises in temperature after laparotomy neglects one of the most valuable indices of trouble.

Now the question arises, may abscesses form after operations without giving rise to abnormally high temperatures? I know that idiopathic abscesses frequently do so exist, and I think that it cannot be doubted that occasionally they may occur after laparotomy and give no such sign of their presence. DR. WALKER operated on an old lady at Harper Hospital for ovarian tumor. She did apparently well and, as I understand, had no rise of temperature after the second day, but from some occult cause gradually failed, and on the eleventh day died.

A post-mortem examination revealed a small abscess deep in the cavity of the abdomen.

Now these abscesses may occur in two different ways, or rather may follow two different courses. The more usual course is for such an abscess to develop slowly in the depths. Around it there is formed an abscess wall which protects the neighboring tissues. This wall grows with the abscess, and usually in the direction of the external wound. Finally it unites with it and one can feel a great mass of false tissue enveloping the inner surface of the the wound and extending deep into the abdomen. If now the surgeon cautiously re-opens the wound and passes a probe through this mass, he will come upon the abscess without opening the abdominal cavity. The introduction of a drainage tube and the thorough daily irrigation of the cavity will then, as a rule, soon bring the matter to a close by the rapid contraction of the abscess wall. I do not know anything which tests the skill of the surgeon more than the judgment exhibited in choosing the time to evacuate such an abscess. I remember one case which I operated on at the Detroit Sanitarium. It was a woman sent to me by DR. E. P. CHRISTIAN, of Wyandotte, and it is in so far peculiar that the abscess was ushered in by a great depression of temperature.

MRS. SCHOENFIELD, of Ecorse, was operated on, on June 8, 1885. She seemed to do well as far as pulse, temperature and stomach were concerned until June 21st. Prior to this time her temperature, which was never over 100°, had become normal, and only a general lassitude and some local tenderness caused in me a feeling of uneasiness, lest there might be some hidden trouble. On June 21st her temperature fell suddenly to 96° F., and she complained of feeling ill. Her stomach began to be very irritable and she vomited bile. After reacting her temperature rose to a little above the normal. As I remember it, for the exact record was unfortunately lost, it did not rise above 100° F. She failed rapidly, however, and rejected all food, and as I could perceive in the depths below the lower end of the wound a distinct tumefaction, I diagnosed an abscess and as the case was urgent, proceeded to open it on June 24th. On opening up the track of the wound I found that it had healed by first intention, and was not adherent to the parts

below. The intestines, however, were matted together, and a hard mass of inflammatory tissue included an abscess, which I opened with my finger. The pus which was discharged was washed out of the abdomen by copious injections of boracic acid solutions, and large drainage tubes inserted.

The operation was followed, however, by a general septic infection, a quick, high rise of temperature, and death on the 27th. In this case the patient's condition did not warrant the delay, which might have been necessary to enable this slow-growing abscess to become attached to the abdominal wall. In treating these abscesses one must wait until the abscess wall becomes attached, either to the roof of the pelvis or to the abdominal wall. If the surgeon operates too soon before this is accomplished, or even when the new inflammatory tissue is too soft and too easily broken, the abdominal cavity may be again exposed, and the patient die of septic poisoning.

The question arises here whether, when the surgeon finds an abscess, which, with its enveloping wall, reaches from the abdominal wound down to the pelvic roof, it is wiser to rely upon the one opening through the abdomen for irrigation and drainage, or whether he should, at the same time, make a counter-opening in the vagina, and secure a more perfect discharge. In many cases the one opening is amply sufficient, but in others it fails to accomplish the purpose intended. If such abscesses usually extended behind the uterus, into Douglas' pouch, it would, in my judgment, be better in all cases to make the counter-opening, for then, with little or no danger to any important part, the most thorough drainage would be at once secured. This is, however, not generally the case, for the abscess usually extends, not from the wound to the post uterine pouch, but from the wound to the pedicle, or to the broad ligament. The counter-opening would then have to be through the upper and lateral vaginal wall, with great risk of wounding the ureter. For no anatomical knowledge would protect the surgeon in cutting through the upper lateral vaginal wall when an inflammatory mass was pushing upon it from above and displacing both uterus and ureter, and on the other hand the injury of the rectum must be regarded as one of the greatest of calamities. In such cases, therefore, it seems to me to be more advisable to make at first only the one opening through the abdominal wall. If that should not suffice to cure, it will at least relieve the patient and it is pretty certain that in time the inflammatory deposit will extend into Douglas' pouch where the surgeon can open it with perfect safety when once the abdominal cavity is protected from intrusion by a sufficient wall of new tissue.

The second class of abscesses are represented by that in DR. WALKER'S case, where a small accumulation of pus among the matted intestines caused eventual death. This kind of abscess, which does not grow toward any surface but remains small and yet exercises a constant deleterious influence on the whole system, is peculiarly dangerous and at the same time peculiarly difficult of diagnosis. They are hard to diagnosticate because they cause only a very slight rise of temperature and make no tumefaction of a size and hardness such as would make them perceptible on a bimanual examination. Their presence has to be guessed at by the great depression of the patient and sometimes by a localized pain or tenderness. When the surgeon sees a patient sinking under such symptoms he must venture to open the wound, using every antiseptic precaution, and hunt for the seat of trouble. The after-treatment must be conducted on the same principles as guide us in a primary laparotomy.

In looking back on the histories of cases which I have lost after oviariotomy, I can see that some might have been saved had they been after the operation under my own treatment, and that others, which I treated in my earlier days myself, might have been made to get well, had I recognized the true significance of the symptoms and treated them as I now know how to treat such cases. I feel daily more inclined to insist upon such patients placing themselves for operation where I can bestow upon them my individual attention. I feel also what a few years ago I did not feel so keenly, that no man should undertake an abdominal section until as an assistant he has had the opportunity of witnessing closely and following out in detail the after-treatment of a multitude of cases.

ACUTE GENERAL PERITONITIS WITHOUT PAIN.*

BY A. J. ROSENBERRY, M. D., WAUSAN, WIS.

The subject selected for our consideration at this meeting is a practical one, which I hope will prove to be both interesting and profitable. For while acute peritonitis is a disease of rather infrequent occurrence, its extreme gravity in many cases, especially in those pursuing an atypical course demands that we should thoroughly familiarize ourselves with all forms of the disease, regular and irregular. It is to one of the irregular forms of the disease that I wish to call attention.

We have all, doubtless, felt the uncertainty and obscurity which attend the diagnosis and treatment of diseases of the abdominal cavity.

The principles which have made the diagnosis of diseases of the thoracic organs a matter

*A paper read before the Sheboygan Co. Medical Society.

of great certainty, can be applied in a limited degree only to the elucidation of the difficult problems presented by diseases of the abdominal viscera. Here is the fruitful field which will prevent any future medical Alexander from "weeping for more worlds to conquer." Until that not distant day arrives when exploratory laparotomy shall set at rest all doubts in diagnosis, we must content ourselves to stumble along in the uncertain light afforded by symptomatology. To illustrate in a practical manner how uncertain this light is, I will report two cases which came under my own observation.

Case 1.—On Friday, March 20, 1883, I was called to see Lena D., a young girl of eleven years, who had complained for two days of a general indisposition, of which the most alarming symptom previous to my visit was vomiting. I found the patient to be a rather bright girl of ordinary size for her age. Temperature 103°, pulse 120. Nothing characteristic about the tongue, slight headache, anorexia, some thirst, but no evidence of any inflammatory action, in short a case of catarrhal fever apparently. The vomited matter seemed to be watery, with some mucus. I prescribed a diaphoretic mixture and left, saying I would call in the morning, at which time I found her better. Temperature 101°, pulse about 100. Vomiting had recurred during the night several times. Countenance was bright at this visit. I directed the treatment to be continued and requested to be called should she be worse. At 7 p. m. a messenger stated the child was worse, and on hastening to the bed-side I found confirmation of the statement. I was at once impressed with the serious nature of the case. The frequent copious vomiting, the anxious countenance and the rapid respiration combined to make a picture I shall not soon forget. On examination of the vomited matter it was found to be watery, and of the shade of a solution of sulphate of copper. I suspected poisoning by this agent and endeavored to promote emesis by copious draughts of warm water, which was soon returned quite clear, but ten minutes later the blue color reappeared. There was slight restlessness but no pain, and frequent palpation of the bowels failed to elicit any evidence of tenderness. I was puzzled, and requested counsel, which did not arrive for eighteen hours. Dr. B. T. Phillips, of Menominee, Mich., was called, and was quite certain that there was a toxic element in the case, and after two observations of the patient, failed to reach any different conclusion, and advised expectant treatment. Restlessness increased during the evening, and was quieted by hypodermic injections of morphine. Death occurred at 4 a. m., Monday—60 hours after I first saw the patient. Autopsy, twelve hours after death, revealed the existence of acute general peritonitis; a fibrinous exudate a quarter of an inch in thickness covered the liver, and under surface of the diaphragm, like a false membrane. The most profound changes were found in appendix vermiformis and its immediate vicinity. A hardened fæcal mass as large as a cherry-stone was found near the blind extremity of the appendix, which was supposed to have originated the whole trouble, and this infamous mark of our evolution was credited with one more victim; large patches of black, softened tissue were found throughout the lower ileum, showing how intense the inflammation was at these points.

Case 2.—In August, 1884, while visiting friends in Kalamazoo Co., Mich., I was requested to see a robust farmer, forty-one years of age, who had, with the exception of malarial attacks twenty years previously, enjoyed excellent health, until two hours previous to my visit. I first saw him at 3 p. m., Sunday, Aug. 10th. He complained of chilliness, slight headache, pains in his limbs and back, and remarked that he "had caught cold." Temperature, 103°; pulse, 110. No pain was spoken of, and the bowels were not examined, as there were no symptoms referable to the abdomen. Not being provided with medicine case, I made a prescription of a diaphoretic mixture, and left. An hour later the family physician drove by just as the messenger was leaving for the drug store, two miles distant. He having his medicine case with him, was requested to furnish the proper remedies. After an examination he prescribed bismuth and morphine to relieve his symptoms, which indicated to him, as to me, a case of catarrhal fever. I next saw the patient at 5:30 Monday morning, two hours after death, which had occurred about 3:30 a. m., twelve hours after I first saw him. I confess, gentlemen, it was difficult for me to convince myself that the man was actually dead. His symptoms had not seemed to indicate the existence of any serious disease, and here, in twelve hours, *rigor mortis* was setting in. Not that I have not observed cases of sudden death, but here was a man who had worked until noon on Sunday, seemed slightly ill at 3 p. m., conversed with his friends at 2 a. m. Monday, and at 5:30 a. m. as dead as Julius Cæsar, with no disease apparent. It was absolutely appalling.

A post mortem at 10 A. M. Tuesday, showed the existence of acute general peritonitis, with a pint of pus in the abdominal cavity, blackened patches marked the lower ileum, which seemed to be the focus of the inflammation, which, as in the former case, probably originated in the appendix. This patient, as well as the child in case I, was subject to habitual constipation.

That peritonitis of the extent and severity indicated in these two cases could exist without

pain was indeed a surprise to me. Pain we are taught to consider a most prominent and unvarying symptom. BARTHOLOW says: "Pain and tenderness in idiopathic peritonitis are very great." LOOMIS says: "All varieties of acute peritonitis, from whatever cause, are ushered in by *pain* as one of the earliest symptoms." ALONZO CLARK, in Pepper's System, says: "In a well-marked case pain is the *first symptom.*" All tend to the same conclusion, to the almost diagnostic character of this symptom, and yet here are two cases where pain was absent, and in at least one not even tenderness could be discovered.

The question naturally arises, "How could so serious injury be inflicted on living tissues without producing pain?" Another query, "Could the morbid change found in the second case have been produced in twelve or fifteen hours?" Is not more time required to produce pus, and the softened condition of the intestines found? It seems to me very important that so grave a disease as the one under consideration should be recognized early, and since there is no absolutely reliable symptom, we can make only what I must call a "drug diagnosis," as I have sometimes done in diphtheria. If increasing doses of opium fail to produce narcotism in a case where we have vomiting, rapid respiration, and an anxious countenance, we are tolerably certain of our diagnosis. I draw the following conclusions from these two cases:

1. Peritonitis of the greatest severity may exist without pain, or even tenderness.

2. The blue or green vomit, rapid respiration, and an anxious countenance are indications for cautiously producing semi-narcosis.

RUPTURE OF THE DUCTUS COMMUNIS CHOLEDOCHUS.

BY J. E. CLARK, M. D., DETROIT, MICH.

Effusions of bile into the abdominal cavity, as the result of trauma, causing a rupture of the gall-bladder, or the ducts contiguous thereto, accompanied by no other lesion of a serious nature, is an extremely rare and interesting phenomenon. Accidents, such as railway, etc., are recorded in which like conditions have existed, but other injuries received at the same time have detracted from the significance of the lesion.

Idiopathic rupture of the ductus communis, or ulceration, by which an escape of bile into the abdominal or thoracic cavity may occur, is occasionally reported. This condition may be caused by any obstruction to the gall-ducts, whether from the presence of calculi in their tracts, an induration and thickening by which they become occluded, the result of an inflammatory disease, or the presence of some specific malignant affection. Distension of the gall-bladder from any of these causes frequently becomes enormous; so much so that it has been, in the case of a female, mistaken for an ovarian tumor on the right side. It, however, is never followed by rupture as the result of such distension, the bile being absorbed into the circulation and diffused through the system.

In consulting literature on this subject I was surprised to find so little was said on this accident.

In a recent number of a current journal, which I have, unfortunately, mislaid, reference was made to a similar lesion, but, aside from this, the only allusion to a similar condition I find in a translation from the French in the advanced sheets of a work on abdominal surgery, by DR. HAL C. WYMAN from "Opuscule de Chirurgie" by PAROISSE, an eminent French surgeon embodied in the following:

"In traumatic effusion of the bile from rupture of the bile duct the fluid is rapidly diffused with extremely irritating results. Severe pain is felt at the moment of the accident. The abdomen swells rapidly, respiration is difficult, the urine is passed in small quantities. General depression of the system is great with perhaps less nausea and vomiting than in injury of other viscera. Deep jaundice comes on quickly, but, in absence of external wounds, the diagnosis is almost impossible. Death sometimes follows in a few hours, or it may be a few days. The bile does not commonly penetrate the convolutions of the intestines. There are only two cases on record, and one of these is disputed by VELPEAU; the other is reported in the "Opuscle de Chirugurie."

The following case occurred in the practice of myself and partner, DR. T. HENDERSON. I offer it as being not only interesting but exceedingly instructive, being, in its peculiar features, possibly unique.

DANIEL STEINHAUSER, a German by parentage but American by birth, living at the time of his death at 402 Croghan street, Detroit, Mich., was a man of light complexion, twenty-one years old, and weighing one hundred and eighty pounds. His occupation was that of a box-maker. The history of the case is as follows:

His general health good as usual. On the morning of the 13th of November, 1886, he went to work as he was accustomed to do, and worked until 4 o'clock, p. m., when, while carrying his regular load of about 80 or 100 pounds with his arms extended, he said he felt something tear within his body. His face became pallid and intense pain was felt in the region of the umbilicus. He was taken home and we were called to see him at about 7 o'clock, when we found the following symptoms present: Intense umbilical pain, nausea and vomiting, retraction of testicles and penis, hippocratic face, skin sallow, pupils dilated, limbs flexed upon abdomen,

abdomen distended, pain relieved by pressure (pressure desired), temperature and pulse normal, retention of urine followed with urgent but unavailing attempts to urinate.

Our diagnosis not being satisfactory we gave morphia sulph. per os, without effect, and afterwards by hypodermic injection with but little relief. He spent a troubled night in a semi-conscious condition and expired at 10 o'clock next morning.

Owing to doubts as to the cause of his death we notified the coroner, and a post mortem was held, revealing a longitudinal rupture of the common duct.

On opening the parietes of the abdomen a quantity of greenish-yellow fluid escaped, which proved to be bile. The distention of the abdomen was evidently due to the enormous amount of bile secreted and thrown into the abdominal cavity, investing and surrounding the intestines.

The liver, especially the right lobe, was of a greyish color owing, no doubt, to the excessive depletion which had occured. The cause or causes which led to the accident appear to be obscure. The liver and appurtenances appeared to be in a perfectly normal condition. The family and previous history of the case gave no indications which would lead one to suspect any previously-existing abnormal condition.

The position, with arms extended while carrying the load, undoubtedly was the direct cause of the accident. But the reason for the rupture in this obscure locality remains a matter for pathological speculation.

ANTIPYRINE IN PNEUMONIA.

BY JESSE B. HALL, M. D., BELLAIRE, MICH.

I have used antipyrine in the following cases of pneumonia:

Case 1.—KATIE B., æt. 1½ years. Broncho-pneumonia. Temperature, 103°; pulse, 135; respiration, 50 per minute. Coughing quite frequently and very deep. Administered antipyrine, gr. iv., every three hours. Improvement from the first dose.

Case 2.—LOUIS H., æt. 3 years. Congestion and slight inflammation of the lungs. Temperature, 102°; pulse, 125; respiration, 48. Administered antipyrine, gr. v, every three hours. Rapid recovery.

Case 3.—Infant son of PATRICK S., æt. 2½ months. Broncho-pneumonia with cerebral congestion. Administered antipyrine, gr. iij, every two hours. Head symptoms disappeared in ten hours, and the patient made a rapid recovery.

Case 4.—MARL D., æt. 3 months. Broncho-pneumonia. The attending physician having pronounced case hopeless, I was called in, and found this little patient with a pulse of only 42, and very depressed, and found the parents still administering veratrum viride, muriate of ammonia, and aromatic spts. ammonia, under the direction of the attending M. D. I immediately stopped all medicine, except antipyrine, gr. iij, every hour for eight hours, and tr. opii camph. gtt jv, every two hours. Patient commenced improving from the first dose.

Case 5.—HENRY F., æt. 21. Lobular pneumonia. Temperature, 103°; pulse, 100; respiration, 32. Administered antipyrine, gr. x, every three hours. Discharged from my care, cured in ten days.

Case 6.—ELMER D., æt. 10. Lobular pneumonia. Temperature, 102°; pulse, 96; respiration, 28. Administered antipyrine, gr. x, every four hours. Discharged him cured in eight days.

In these cases profuse perspiration followed the administration of the antipyrine, and the respiration and pulse were immediately depressed to nearly normal, while the temperature fell to 99° or 100°.

The only other treatment was the administration of a cathartic, and the application of hot fomentations to the lungs.

I would like to hear from others upon this subject; also upon the propriety of giving ammonia muriate in the active inflammatory stage of broncho-pneumonia.

The following is from the Journal de Medecine de Paris, of December 19th, 1886, by DR. MINIME: My friend, a well known gynecologist, tells me the following: He was examining, on his surgical chair, a very honorable lady, who was troubled with a metritis of some kind. After he had removed part of the clothing of the patient he introduced the speculum. As soon as the instrument was in place the lady uttered some little guttural cries—"ah, ah, ah!" The gynecologist was surprised, and, fearing that he hurt the patient, took the speculum out and introduced it again with special care. The same guttural cries were heard—ah, ah, ah! Still surprised, he asked the lady for the cause of these utterances. She told him simply that having had to consult frequently a laryngologist, he had always on introducing an instrument told her to utter a guttural exclamation—ah, ah!—in order to enable him to make a better examination. The lady thought, in her innocence, that the exclamation of the word "ah" would facilitate equally the examination with speculum, of the vaginæ.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JAN. 25, 1887.

Editorial.

IS THE PRESENT ANTIPYRETIC TREATMENT OF TYPHOID FEVER BENEFICIAL.

The majority of practitioners to whom this question is addressed, would be scarcely less astonished if they were asked whether, in their opinion, quinine is of any use in ague. It has come to be the almost universal practice to feed typhoid patients and to keep down, as well as may be, the pyrexia, leaving it for the disease to run its course. All attempts at aborting this self-limited disease have been demonstrated to be futile, and, perhaps, positively harmful. But while it is generally admitted that the storm cannot be quelled most practitioners flatter themselver that it is in their power to so moderate its violence as to permit of the vessel's outriding it, and sailing into the placid waters of convalescence. The intimation that their efforts at pouring oil on the troubled waters do no good will be promptly resented. Some there are, however, who will listen to argument in support of a negative answer to the question, and to these a paper read by Dr. S. Baruch before the New York Academy of Medicine, and published in the Medical Record, will be read with interest. Dr. Baruch has collected statistics from the mortality report of New York City for the past ten years. These show the occurrence of 7,712 cases of typhoid fever and 3,184 deaths, or an average percent. of mortality of 41.28. During the last autumnal season, viz., from September 1 to December 16, 1886, the cases reported were 527, with 183 deaths, or a death-rate of 34.68 per cent. This is certainly a very bad showing, and the fact that it occurred in a city where the antipyretic treatment in vogue was, presumedly, most strictly carried out, is not calculated to strengthen confidence in that treaement.

Dr. Baruch, after referring to the improvement in the death-rate of typhoid fever following the prevalence of the so-called expectant method of treatment and to the still further improvement possible under the antipyretic method, indicates the evils attendant on the carrying of both of these methods to excess. The highest degree of safety lies between the extremes. His remarks on the significance of the pyrexia are entitled to careful consideration:

The elements of danger which threaten our patient have, he says, been well ascertained to be: First, hyperpyrexia, which jeopardizes the heart-muscle and induces great depreciation of the entire muscular system by the excessive oxidation, to which it is partly due. Second, failure of the vital power through the enfeebled condition of the digestive and nutritive processes. The immediate and remote results of the local gland-lesions.

The physician who clearly recognizes and has steadily in his mind's eye these ever-present dangers, and who endeavors to arm himself with means to avert and neutralize them, will attain to the most successful results in his treatment.

He holds that the first and most threatening of all perils in typhoid fever is heart-failure. So long as the cardiac sounds are clear, the impulse at the apex distinct, and the pulse-wave resisting, so long, we all know, there is a good prospect for our case.

Let the temperature be what it may, with a good heart we expect to carry our patient through safely. A good heart is to the physician in typhoid fever what a stanch ship is to the mariner in a storm. Let us, then, do all we may to preserve the integrity of that organ, upon which so much depends. He uses the term "*preserve its integrity*" advisedly, for while we may not need the strong heart during the first days of the fever, the day will come when we will call upon Hercules to help us, and woe betide our patient if we *then* call in vain, if we *then* discover too late that the golden moments for storing up reserve forces in the heart have slipped from our grasp. The first weeks offer an opportunity for providing against the day of need, which will almost surely come in all cases in which a high temperature has prevailed.

We possess, in a judicious selection and application of the antipyretics at present employed, a therapeutic recourse which preserves the heart and muscular system for the struggle which will be thrust upon the patient. Some hold to the view that stimulants administered in the beginning of the fever process tend to conserve cardiac energy; but this idea has been proven erroneous. Stimulants afford a spur to the heart when already enfeebled and laboring under stress of typhoid fever. They are as valuable at this time as they are injurious in the early days of most cases.

We know, however, that a continuous high temperature imperils the heart, and disables it from coping with coming emergencies. By reducing this temperature to a reasonable limit, the danger is diminished. A temperature

of 102° or 103° F. is not fraught with danger; on the contrary, the fever process is a conservative effort of nature; it should not be violently interrupted. But when the temperature rises to 104° and over, and so continues for many hours without falling below 103°, at last there is danger to the heart. It must be reduced at once. If this rule be applied in the early days of the case, he has no doubt that the course of the disease will be favorably modified.

Dr. Baruch does not favor very cold baths nor large doses of antipyrin (these being our safest antipyretics at present). Just enough antipyresis to bring the temperature for five to seven hours below the danger point, is urgently demanded. It is an error of frequent commission to regard a temperature below 103° as dangerous, and to intercede for its reduction. All that is necessary is to *curb the pyretic tendency*, and leave the rest to that good old handmaiden of the doctor, the *vis medicatrix naturæ*.

Experience teaches that in the treatment of all diseases of any duration, it is of immense importance to bend every effort to secure for the patient as nearly a normal condition as is possible. In other words, the more comfortable we can make him, the more sleep we secure for him, the more naturally his secretions are maintained, the more surely is he to recover. Now, we have in the graduated Ziemssen bath and in the more recently-introduced antipyrin, safe and certain measures to reduce the high temperature, which not only jeopardizes that fountain-head of all strength—the heart—but which also renders him thirsty, wakeful, restless, and altogether miserable. We reduce a temperature of 105°, by moderate doses of antipyrin and cold sponging, to 102°, the patient perspires, the pulse softens, the tongue becomes moist, the kidneys act better, and altogether our patient expresses himself as more comfortable. Is this not an important factor in carrying the case to a successful issue?

The idea that the secondary effect of antipyretics is depressing to the heart, has been urged as a serious objection to their employment. This is true of large doses of these remedies, as it is true of inappropriate doses of all valuable remedial measures. The sudden submergence of a typhoid patient with a temperature of 104° into a bath of 60°, several times a day, according to Brandt, may not weaken a German soldier, but it is not so well adapted to an American constitution, if we may judge from our own hospital reports. At any rate, this heroic treatment has not found favor in our hospitals.

We have come to recognize the fact that a rapid and sudden reduction of temperature, from 104° to 99°, is not necessary at all, even if it be not a dangerous measure. All that is required is to bring the temperature down below the danger-point, and keep it there for four to six hours out of the twenty-four. This may be accomplished by cold sponging, and cold wet compresses over the larger part of the anterior portion of the body, without disturbing the patient very much. Indeed, these are so grateful to him that he rarely objects to them. By this means the temperature may be almost invariably brought down one or two degrees, and held at this point for a few hours. If it be necessary, however, to make a more rapid impression in cases of very high temperatures, the graduated Ziemssen bath may be resorted to with advantage.

To a patient with a temperature of 105°, water at 95° will feel rather cold, and afford sufficient shock to the nervous centres to arouse them. The extremities are kept out of the water as much as possible, and chafed if cool; ice-water is added near the neck of the patient, and by rapid stirring the temperature of the bath is reduced to 80°. The pulse is watched, and a thermometer in the mouth will indicate when a reduction to 101° has been attained. The patient is now wrapped in a linen sheet, his extremities enveloped in flannel, and a wet compress laid upon his abdomen. The result will be an almost certain reduction of temperature of several hours. If the nervous centres are overcome, and stupor is present, a more sudden cold immersion will be of great value, and often accomplish more than the mere reduction of temperature or stimulants can do.

In a large proportion of cases, however, the bath is not required, especially as we now have, in antipyrin, a safe, reliable, and rapid antipyretic. It is Dr. Baruch's practice now to prefer antipyrin to the bath, unless there be considerable disturbance of the nervous system, with sleeplessness and delirium.

And here again it should be urged that the heroic doses prescribed by the gentlemen who introduced antipyrin are entirely unnecessary. Doses of thirty grains, repeated hourly until the temperature be reduced to 100, should never be resorted to. A dose of twenty to twenty-five grains for an adult, repeated in an hour, if the temperature has not begun its downward course, will accomplish all we require for the safety and well-being of our patient. Bring the temperature to 101° or 102° for four or five hours, and the pernicious effect of a continuous hyperpyrexia on the heart will be stayed. The later stages of the disease will afford valuable evidence of this antipyretic effect, inasmuch as the heart will respond to stimulants when it begins to flag, during the third or fourth week.

Dr. Baruch summarizes his conclusions as follows:

A proper use of antipyretics modifies the course of typhoid fever, and diminishes the mortality, because it diminishes the chief danger—heart-failure—and because it enables us to

render the patient more comfortable, and therefore more quiet and tractable.

LABORATORY OF HYGIENE AT THE UNIVERSITY.

The proposition to create a department of hygiene at the University of Michigan, which has for several years been somewhat inchoate, has at last blossomed forth in well-rounded form, and we have before us a copy of an argument in support of it, made by the Secretary of the State Board of Health, before the meeting of that body on the 11th inst. In this argument the Secretary holds to the opinion that "the highest education, and that of most utility, is that which best fits one for right-living—in every sense—that which has to do with the preservation of life, and the perfection of physical and mental health." This opinion is, of course, axiomatic, and is by no means startlingly novel. The argument is that a laboratory of hygiene would enable investigators into the causes of disease to discover them, and, discovering them, to discover the means of their prevention. The result would be the abolition of disease from the community and the consequent increase of the sum-total of health, wealth and happiness in the human family. 'Tis a consummation devoutly to be wished. It is, of course, not expected that preventable disease would at once disappear, as the result of the establisment of laboratories of hygiene, but the successful working of these institutions would ultimately secure the much-desired and confidently-hoped-for end. The possibility of the accomplishment of the end, the Secretary argues, in effect, affords an ample justification for the devotion of a sufficient share of the public funds to provide for the establishment of the laboratory and the salaries of such hygienic investigators as might be necessary to its full equipment.

We are not prepared at this time to endorse SECRETARY BAKER'S masterly plea, nor are we disposed to throw cold water on the scheme. We write now as a physician who makes his living and provides for his family through taking care of those whose misfortune it is to get sick, and not as the physician who is paid a handsome salary for his time devoted to the prevention of the misfortunes through which practitioners of medicine, as such, live and move and have their being. Writing from this standpoint we detect a certain incongruity in the proposition to establish at the University of Michigan a department the ideal success of which must, necessarily, be to deprive the hundreds and thousands graduated, and being yearly graduated, from another department of the same institution, of the means of subsistence. The success of the proposed laboratory of hygiene would be the extinction of the department of medicine and surgery at our State University, for where would be the necessity of curers of disease when the preventors thereof had attained to the perfection of knowledge which the proposed laboratory of hygiene would contemplate? Most men enter medicine as a money-making business as well as a profession, and it is not uncharitable to believe that the divorce of the business and the professional in medicine, would be followed by such a decrease in the number of matriculates as would cause many medical colleges to sink into innocuous desuetude.

But, seriously, the proposition to educate preventors of disease, whose most laudable endeavors would be most antagonistic to the interests of the physician, *per se*, is one of great practical interest to the medical profession. To citizens, and to truly philanthropic physicians, the proposition is a very commendable one. It is the highest function of the physician to prevent, rather than to cure disease, but when it comes to asking him to exercise this highest function to the direct detriment of personal interests, as it must be, the case assumes a phase not taken into account by the enthusiastic hygienist. We believe physicians should be thoroughly educated to the discharge of this function, but, in justice to the profession, the method of recompensing them for their services should be adjusted on a quite different basis from that which now obtains. When it shall once be declared not unethical for a physician to work on the contract system, the cause of preventive medicine will receive an impetus at once gratifying to the salaried physicians in the employ of our boards of health, and to the public at large. When the physician shall receive a stated sum per annum for the treatment of a family, the science which will enable him to draw that sum with the least possible amount of therapeutic work done, will assume for him an interest previously not dreamt of.

IS TUBERCULAR CONSUMPTION INHERITED?

DR. HENRY D. DIDAMA, of New York, has written a paper, in which he gives a negative answer to this question. His conclusions are formulated as follows:

1. Tuberculous phthisis is not inherited.
2. Neither is a special tendency to the disease transmitted. In *fragilitas ossium*, the great brittleness of the bones is not spoken of as a tendency to fracture; liability is a better expression. An inherited tendency to catch small-pox would be a double absurdity.
3. Many conditions—as poor and insufficient food, damp and impure air, stinted sunlight, low altitudes, certain occupations—favor the taking and development of the disease.
4. Two conditions are almost indispensable,

abundance of bacilli, and an inviting asylum for them, furnished by an inherited or acquired cellular vincibility.

Touching the prophylaxis and therapeusis of the disease he has the following:

1. The new-born babe of a tuberculous mother should be committed at once to the tender mercies of a healthy wet-nurse, who should occupy well-aired and sunshiny rooms, at a distance from the apartments of every one having a chronic pulmonary affection.

While this isolation from unhealthy surroundings affords no infallible protection against subsequent contamination—since the feeble constitution may still remain—it gives time to fortify the health and so lessen, if not eradicate, the liability to infection.

2. Abundance of sunshine, pure air, and food are of great value, not only to the patient, but to the family and nurses. The progress of the tuberculous disease may be hindered, if not arrested; the bacilli may be dispersed; and their unceasing attacks repulsed or overcome by the invigorated resistance.

3. If a syphilitic taint in either parent be known or suspected, prolonged specific treatment of the infant should be instituted; not alone to remove the existing inherited disease, but to strengthen against tuberculosis, which is liable and likely to be superadded. Continued efforts to overcome inherited or acquired weakness may prevent bacillary infection or hinder its development.

DEATH OF DR. EDWARD DORSCH.

Dr. Edward Dorsch, who died at Monroe, Mich., on the 10th inst., was a man much above the average in point of education and ability.

He was born at Wurzburg, Bavaria, Jan. 10, 1822, and entered the University of Munich when 18 years of age, taking the full course of studies, and graduating with the honors of the institution. He then pursued special studies one year at the Vienna University.

He came to this country in 1849, was married in New York, and came to Monroe with his wife in November of that year. He at once commenced the practice of medicine, which he followed continuously up to the day of his death. He enjoyed a large practice, and led a useful and active life.

He was a scholar and a student, and lived much with his books, where he found his chief delight.

Dr. Dorsch performed a good deal of literary labor. He was a regular correspondent of two or three German papers, and published several volumns of poems. His first was a small volume entitled, "Shepherd's Songs," mainly pertaining to the German revolution. In 1875 he published a volume of poems entitled, "Parabassen," and in 1883 another volume entitled, "From the Old to the New World." This was a volume of political poems, dealing with the salient features of our political history covering his residence here. All his writings were in German. He was also a proficient botanist and naturalist, and took great delight in those studies.

At a meeting of the medical profession held at the office of Dr. Root, Wednesday evening, the following resolutions were unanimously adopted:

Whereas, It has pleased Almighty God, in his inscrutable wisdom, to remove from our midst our associate and brother in the profession, Dr. Edward Dorsch; therefore

Resolved, That we learn of his death with sincere sorrow and regret, and embrace this opportunity to express our appreciation of his ability as a physician, and also of his literary and scientific attainments, which were well worthy of emulation.

Resolved, That we tender to the family of the deceased our deepest sympathy in their hour of affliction, and that a copy of these resolutions be transmitted to them and furnished the city papers and the Detroit Medical Journals for publication.

W. C. West, M. D.
A. I. Sawyer, M. D.
G. B. McCallum, M. D.
P. S. Root, M. D.
Committee.

CONTAGIOUSNESS OF SCARLATINA.

Scarlatina is commonly held to be one of the most contagious, or infectious, of diseases, and many a practitioner has prided himself on the success of the particular method which he has employed to prevent its dissemination. Statements made by Dr. Arthur V. Meigs in a paper recently read before the Philadelphia County Medical society, will therefore be a surprising revelation to such. The conclusions of this paper are as follows:

1. Experience shows that scarlet fever is not so actively contagious as some of the other exanthemata, and that it is largely because it is so dangerous a complaint, and often so terribly sudden in its effects, that it is so considered, and that therefore,

2. It is proper that we, as physicians, should combat the unreasoning fear the public have of the disease, and should diffuse more generally an understanding of the real degree of its contagiousness, and should lay down rules with regard to what ought to be done to prevent its spread.

3. That it is, comparatively, slightly contagious during the first day or two after its outbreak, and that, therefore, it is very important to take all reasonable precautions, even if the disease is not very early diagnosticated; in this respect differing radically from measles, whooping-cough, etc.

4. That the disease is not nearly so much carried from place to place by persons unaffected transporting it upon their persons and on their clothes as is commonly believed.

In the discussion which followed various opinions were expressed. Some of the members; DR. WILSON in particular, were of opinion that the contagiousness of scarlet fever was not overestimated. The majority, however, were in accord with the conclusions arrived at by DR. MEIGS.

ANOTHER CAUSE OF LOW FEES.

The interest in this question is not confined to the readers of the AGE who have recently had placed before them some quite interesting communications on the subject. Neither is it confined to the profession of this country. The Provincial Medical Journal, of England, has recently had a series of seven articles, in which the causes of low fees are discussed. The cause is given which has, probably, never suggested itself to the American sufferer, namely, the influx into the profession of late years of persons from "the lower strata of society." These persons are generally poor, so it is alleged, and starting in practice are obliged from the beginning to earn enough to live on. Commenting on this conclusion of our foreign contemporary, the Medical Record aptly remarks that "It is part of the glory of our country that persons of the humblest class have here the right and opportunity to rise to the highest positions.

"But we can also recognize that this prevailing desire to rise often springs from discontent and laziness rather than honest ambition, and often leads to placing persons in positions which they signally fail to fill.

"The ranks of the profession in this county are remarkably full of persons who started from the very bottom, educationally, socially, and financially. It is greatly to the credit of the American character that it shows such power of cultivation and development, and that the American physician illustrates this better, almost, than any other class. There is a tremendous development and educational power in medical work.

"At the same time, our profession shows plainly to what an extent it is recruited from the very poor; and we can trace to this fact, especially in cities, much of the very small-fee system, and the consequent hard work and financial straits of the physician."

MRS. CATHERINE WOLFE, an eastern lady, is hopelessly ill of Bright's disease, but she has an abundance of wealth, and is determined to have all the luxuries which money can supply. She has accordingly engaged a doctor to visit her twice a day while the lamp holds out to burn, and for this service agrees to pay him at the rate of $50,000 a year. Sixty-eight dollars and a half a visit! Just think of it! And the doctor is a homœopath at that.

Notes.

There is a good deal of the wisdom of the serpent, as well as appreciation of the limitation of medicine, in the following, by a writer in London Truth:

A doctor may very easily make a fair reputation, and a good deal of money, without much knowledge of medicine; for this reason, that the science of medicine is a closed book to the vulgar. When a man dies, none of his friends (unless there chance to be a coroner's inquest) know in the least degree what killed him. And if you call in some great medical gun at the last moment, the great medical gun is sure (indeed, I believe, by the etiquette of the profession, he is bound) to tell you that your doctor has "treated the case most judiciously." On the other hand, when a sick man gets well, no one knows what cured him, and the doctor—who was, perhaps, on the wrong track throughout—gets all the credit. Thus, the best—indeed, almost the only—way in which a doctor can convince his patients that he is wise and knowing in his profession, is by showing them that he is a clever and well-informed man out of his profession. Of his science as a doctor they are not in a position to judge; but if he talks sensibly about subjects which they do understand—stocks and shares, and pictures, and last night's debate in parliament, and has fair luck with his cases—then his patients will trust and swear by him. I remember one very sad illustration of the injury which a doctor does himself who drops behind in his general information.

The New York Medical Monthly is a very new journal, and, probably, its editor is a very young man. The following from an editorial in its January number is what gives rise to the presumption: Above all things the medical man of scientific aspirations should see to it, that his ambition is not led astray by the vain-gloriousness of his surroundings. If his neighbor be a millionaire, he should court simplicity, for in doing so he may be sure that his mental accomplishments will stand forth the more. But if his lot be cast in a poor community, he should the more court simplicity, inasmuch, as by so doing, he will the better avoid the stings of envy. The thirst for riches is one of the least commendable features of our modern social life; and while comfortable surroundings are desirable for all, the scientific physician should be far above the petty shifts of the *parvenu*.

PROF. SERGEI PETROVICH KOLOMIN, Professor of Surgery in St. Petersburgh, was a very sensitive man. He injected twenty-four grains of cocaine into the rectum of a patient whom

he diagnosed as suffering from tuberculous disease of that viscus. The injection caused death and the autopsy revealing the incorrectness of the diagnosis, the professor suicided with a pistol. It is not generally held to be such a serious matter in this country to err in diagnosis. If it were the question of the preponderance of doctors here would speedily be solved.

A hirsute doctor gets back on those who inveigh against beards in the profession, in the following manner: "It is possible that if the shaven-faced doctors would go into seclusion for a time, and study nature's laws more, and æstheticism less, it might not be a disadvantage to them, and a decided advantage to the people." It must not, of course, be concluded from this sapient remark that hair and brains are necessarily synchronous in the individual. They might be, and then again they might not.

The American Medical Association holds its annual meeting in Chicago, June 7th to 10th next, thus conflicting with the annual meeting of the Michigan State Medical Society. The Executive Committee, for this reason, have designated the 12th and 13th days of May next for the annual meeting of the Michigan State Medical Society, which change members are requested to note. Members intending to present papers are requested to send the subject of their papers to the Secretary at once.

Dr. Fessenden Otis, an acknowledged authority (on venereal matters), insists that the oft-ridiculed infection of the urethra from a water-closet, is by no means an impossibility. A urethra which has once suffered in the regular way, is very sensitive to contagion, and as micrococci are extravagantly abundant, they very probably exist in large numbers in the neighborhood of urinals. The veracity of the virtuous must, therefore, not be so much suspected as of old.

The N. Y. Medical Journal, in commenting on a recent advertisement of "an experienced attorney," who offers his services at $5 a week, finds in the fact a ray of consolation for young doctors. Yes, misery loves company, and there are degrees even in abject poverty, but we should admire, in comparison with the professional man who would sell his time at the rate of $5 a week, him who would throw his profession to the dogs and rely on the profits which he might make out of a buck-saw.

Mutisia viciæfolia, a plant growing in Bolivia and "jealously guarded and kept secret by the natives" (after the usual manner) has been timidly put forth as a specific for consumption, by a Dr. Sacc, for many years a resident of Cochabamba. While it is too soon to embrace it let us keep an eye on it, as well as on its manipulators.

Parties desiring copies of the National Code of Medical Ethics may procure the same for two cents apiece by addressing the Journal of the American Medical Association, at Chicago. There can now be no excuse for ignorance of the proper way for doctors to behave to one another. Every fellow can afford to be ethical at this price.

Here is another dark touch to the deep shading which the pessimistic descry as surrounding the medical profession. It is by the Indiana Medical Journal: "Too often the doctor has no business sagacity. From the day he leaves college he advertises himself, by his loose business methods, as a standing candidate for starvation or the poor house."

Lanolin seems to have enjoyed but a brief season of popularity. Mollin is now on the stage asking for the favors erstwhile bestowed on lanolin. Mollin is a soft soap containing an excess of fat with glycerin. It is said to meet all the requirements as an excipient for ointments.

A St. Louis quack, who guarantees cures for sums of money paid in advance, pays a lawyer $5,000 a year to defend him in actions brought against him by his victims. It is said that he nets $8,000 a year above this and all other expenses.

They are grumbling in Buffalo, too. Three hundred and forty-six doctors among about 200,000 people, and while more are rapidly coming in, the sanitary condition of the city is improving. The latter fact is good for the people, but for the doctors, not so.

The college at Asti was, according to the N. Y. Medical Times, the first to confer the title of Doctor of Medicine. The first recipient of the degree was William Goodenia, in the year 1329.

It is estimated that the supply of medical practitioners in Illinois is between 1500 and 2000 in excess of the demand. It is quite possible that a similar glut of the market exists in other States.

Gout is the aristocratic disease in England. In this country rheumatism is apt to be soon so regarded. President Cleveland has it, Blaine has it, Logan had it, and some of the rest of us have occasional twinges of it.

"Life" says that they do not say "stomachache" in Boston. They call it gastric neuralgia; but it gets there, just the same.

Therapeutic Brevities.

TREATMENT OF DIPHTHERIA.—DR. F. B. DRESCHER (Weekly Medical Review) has made use of the following treatment in diphtheria with marked success:

℞ Hydrargyri bichloridi, gr. ½.
Spts. frumenti, ʒ i.
Syr. simplicis, ʒ i.

M. Sig. Teaspoonful every three hours, night and day.

℞ Liq. ferri subsulphatis, ʒ ii.
Glycerin, ʒ ii.

M. Sig. Brush the throat once or twice daily.

℞ Tr. ferri chloridi, ʒ ij.
Potassii chloratis, ʒ i.
Glycerini, ʒ iss.
Aquæ cinnamomi q. s. ad. ʒ iij.

M. Sig. Teaspoonful in teaspoonful of water every three hours, night and day.

AN AGREEABLE VEHICLE FOR PARALDEHYDE.—At a meeting of the Brooklyn Pathological Society, DR. ECCLES recommended the following as an agreeable way of administering paraldehyde:

℞ Paraldehyde,
Almond oil, of each ʒ ij.
Chloroform, ♏ x.
Oil of cinnamon, ♏ij.
M.

One-half to be taken at bedtime, and the remainder during the night if required. It may be taken undiluted, although ordinarily it will be advisable to give it in a little water.

A DISINFECTANT MIXTURE FOR APARTMENTS.—A contributor to the Union médicale for Dec. 16, 1886, gives the following formula:

Camphor, 20 parts.
Calcium hypochlorite, 50 parts.
Alcohol, 50 parts.
Water, 50 parts.
Oil of eucalyptus, 1 part.
Oil of cloves, 1 part.

Mix in a large vessel kept cold. A few drops, on a napkin, are enough to disinfect a room.—*N. Y. Med. Jour.*

FOR CANCER OF THE STOMACH.—GERMAIN SEE gives the following for the relief of the pain after taking food, in patients with cancer of the stomach:

℞ Tinct. conii,
Tinct. hyoscyami,
Ol. anisi, ää ʒ ij.
Tinct. gentianæ, ʒ j.
S. Ten to thirty drops after meals.

Medical Progress.

CHLORAL HYDRATE AS A POISON.—It is less than a score of years since LIEBREICH published his monograph announcing his discovery of the anæsthetic and hypnotic properties of chloral hydrate

His paper, which was about a drug practically unknown at that time, attracted universal attention, because of the importance of the discovery, and also on account of the high position which the author occupied among Berlin scientists.

Chloral is obtained by the continued action of chlorine upon alcohol, and its close relation to chloroform in composition doubtless suggested to LIEBREICH the possibility of its possessing anæsthetic properties. When treated with an alkali, it is resolved into chloroform and a formate, which led its discoverer to the theory that its action upon the system is the result of decomposition, caused by the alkaline blood-producing chloroform, which acts first, upon the ganglia cells of the cerebrum; secondly, upon the ganglia cells of the spinal cord, and thirdly, upon the ganglia cells of the heart.

This view of LIEBREICH was corroborated by experiments of DR. W. B. RICHARDSON, of London, who found the circulation in the web of a frog's foot perfect, when the animal was completely anæsthetized by chloral and apparently dead. In fatal cases he found the functions destroyed in this order: 1. Cerebral. 2. Voluntary muscular. 3. Respiratory. 4. heart.

DEMARQUAY, Surgeon to the Hospice Dubois, also conducted extensive experiments with the drug upon rabbits, and verified LIEBREICH'S theory of its mode of action, but makes this significant statement: "The animals in whom anæsthesia is general and absolute, may remain in that condition for several hours, but almost invariably succumb." This was not a very encouraging statement for the "new anæsthetic," but was accepted by the profession as a sufficient reason for abandoning its use as a substitute for chloroform or ether in surgical practice.

DEMARQUAY also found that it modified unfavorably, the number and rhythm of the movements of the heart, caused progressive slackening of the movements of the diaphragm and lowered the temperature considerably. A remedy capable of causing such effects, beginning with paralysis of cerebral ganglia and ending with paralysis of the heart, should certainly be considered one of the deadly poisons.

Although, as I have already said, it has secured no recognition as an anæsthetic, its use

as a hypnotic, anodyne, anti-spasmodic and sedative, has become almost universal. The list of diseases named in Ziemssen's Cyclopedia, in which chloral is recommended is simply appalling. Here are a few of them: Acute spinal meningitis, acute nephritis, bronchial asthma, chorea, croupous pneumonia, delirium of inanition, delirium tremens, gout, hydrophobia in man, hysteria, palpitation of the heart, pulmonary hemorrhage, renal colic, spasm of the bladder, strychnine poisoning, cerebral syphilis, tetanus, uremic convulsions and insomnia. On what grounds such a man as JUERGENSEN, Tübingen, would recommend a single dose of chloral of from 77 grains to 2 drachms, to a patient with croupous pneumonia, to relieve a feeble heart, by causing sleep, is one of the anomalies of medical literature which is beyond my comprehension.

My professor of Materia Medica informed me when near my graduation, that this new drug, if given in doses of 30 grains, would quickly soothe the irritated nervous system; cause the patient to fall into a quiet, natural sleep, from which he would awaken in the morning refreshed and free from all the disagreeable symptoms usually following other remedies.

Almost my first case in practice was a hysterical woman about 50 years of age, who needed some such remedy and I was glad to know just what to give. I ordered the 30 grains and retired. The quiet sleep I had led them to expect was supplanted by general convulsions, which kept everybody awake until daylight. With undaunted faith in my professor, my next case was undertaken with the utmost confidence. The patient was a lady, aged 35, who was suffering from a neuralgia in the back of the head and in the lumbar region. It was about three weeks after my first exploit. Thirty grains was administered as before. Within forty minutes I was hastily called and found this patient in violent general convulsions. In all my experience in private and hospital practice I have never seen so marked opisthotonos as in this case. Medical assistance was called, and, after much difficulty, the patient's life was saved. Two years later, a clergyman, who was my professor of Greek, in college days, and for whom I had great esteem, took a drive one day; upon his return had a slight headache and languor; took the usual dose of a chloral mixture given him for insomnia, and lay down for a short sleep. About thirty minutes later he was discovered breathing stertorously, with livid face, cold extremities and died soon afterwards. He had no disease of the heart, which all agree is a contra-indication to the administration of chloral. This case exemplified the fact as stated by DR. RICHARDSON, that the limitation of the quantity which may be taken safely is not materially modified by persistence in the habit of taking it, but rather the reverse, in which it differs from opium. My friend died from the effects of a dose which he had safely taken on many occasions with satisfaction.

In a case reported by MR. ABBOTT, in the Lancet for April 20, 1872, the patient, with rheumatic fever, had taken a drachm, in solution, for restlessness, and been much benefitted. Again taking the same quantity, he almost immediately broke out into a cold perspiration, followed by acute pain in the muscles of the back, dimness of sight, palpitation of the heart, twitchings of the muscles of the thighs and hands and opisthotonos. The spasms were intermittent, but continued three hours. The resulting dangerous symptoms in this case may be attributed to the giving of a drachm dose, which many would consider unsafe, but only three months later, July 13, 1872, the Lancet contained the report of a middle-aged man who had a boil on the buttock, which was lanced. Only nine grains of chloral was administered, which almost immediately produced cold perspiration, the body becoming stone cold, the teeth fixed and the patient staring wildly. In the same journal is the report of a lady, aged 68, who was rendered semi-conscious by seven and one-half grains, and afterwards suffered severe pain in the epigastrium.

Another well-authenticated case, also from the columns of the Lancet, was that of a lady who took ten grains at bedtime and was found dead in the morning. There was no other cause of death, except her being an epileptic. While she may have had a convulsion during the night, if so, it was not sufficient to wake her husband.

There is sufficient evidence in the few cases just narrated to show the extremely uncertain effects of similar doses on the same individual, or on different persons.

Certainly, dangerous dyspnœa, convulsions, cold perspirations, semi-consciousness and death, are none of them desirable results of the physician's treatment. There is one class of patients to whom chloral hydrate is still given in large doses, and, as most physicians believe, in safety. I refer to those with delirium tremens, and other cases of alcoholism requiring a hypnotic. Although alcohol is in no sense an antidote for chloral, it is believed that such patients are less susceptible to chloral poisoning. The first reason for this belief which occurs to mind is, that when a man is saturated with one poison, it is difficult for him to absorb more, just as a wet sponge is not able to absorb much water.

DR. J. H. BURNS, of the Liverpool Workhouse Hospital, reported ten cases of delirium tremens to whom chloral was given, in doses varying from thirty to ninety grains, in most of whom sleep occurred in thirty minutes. He advised sixty grains as the minimum dose. DR. MURCHISON advised thirty grains every two hours till sleep is produced. Nearly every textbook on materia medica and therapeutics still advises its use in these alcoholic cases.

Physicians who use it have good authority for doing so. Yet, I venture to say this, that nephritis in one form or another is a very frequent concomitant of alcoholism, and nearly all who have written on the subject believe that it is unsafe to give chloral to a patient with chronic nephritis. I am well aware of the fact that some authors, including BARTELS, of Kiel, advise its employment in this disease, but caution against its use in such cases as are scattered through the entire literature relating to this drug. BARTHOLOW declares that no hypnotic is so uniformly successful in delirium tremens, but a few lines further on, says that sleep *may* be procured, which will end in fatal exhaustion. He furthermore says, that great care should be taken in prescribing an agent of such uncertain power.

One of the first cases of fatal poisoning which I find recorded, was that of a medical gentleman, aged 39, who was an inmate of a private

establishment for the treatment of dipsomania. It occurred April 11, 1877. Fifty grains was given at bedtime to produce sleep, and failing, the nurse followed the physician's directions and gave a second dose, and death soon followed, preceded as usual by stertorous breathing, cold perspiration and extremities, dyspnœa, etc.

DR. HOLTHOUSE, who was a consulting physician to the Westminster Hospital, and in charge of this unfortunate patient, used these words in testifying at the inquest: "The patient died of chloral, but I wish to explain that what would be a large dose sometimes, to the same person would, under altered circumstances of body, be a very small one. There is no accounting for these changes in the system. An individual might, with safety, take eighty grains at one time, when, perhaps, at another time twenty grains would kill him." During the trial the coroner stated that it was the third case of death from chloral which he had lately investigated.

My notes contain numerous histories of cases where inebriates have died from the effects of chloral, but they are mere repetitions of the same story. All emphasizing the facts already mentioned. That it is a very uncertain drug in its action: that there is no certain means of determining to whom it can be safely administered; that death occurs so rapidly that no antidote would avail anything if we had one; in other words, that chloral hydrate is a very dangerous remedy to be in the hands of even medical men. If what I have said is not new, it is, in my judgment, worthy of consideration, in view of the present reckless manner in which its use is advocated in our book, and taught to the graduates of medicine in recent years.

Reference has thus far been made only to acute chloral poisoning, but a more important consideration is the chronic poisoning and the chloral habit. The medical profession has so taught the laity, that chloral has become as familiar as almost any of the ordinary household remedies. DR. RICHARDSON foresaw this danger and deprecated its use by the people unadvised. The editor of the Lancet, on May 3, 1873, warned the public against using it, and among the dangers therefrom declared that it seriously affects intelligence and memory, and produces partial paralysis of the limbs, and declares that its habitual use is worse than opium. The victim's physician is usually guilty of gross carelessness, or something worse, in the formation of the opium habit, and the same holds true in this equally serious chloral habit. It should be our first duty to teach the people that chloral is a poison than which none is more dangerous, if employed without a physician's careful supervision. The next step should be such a revision of the law regulating the sale of poisons, that this or any other poison cannot be procured except upon a physician's prescription. I do not know who the author of the present law of this State may be, but this is certain, that it is a law which in no sense prohibits the sale of poisons of any description to anybody who wants them. A man, as you all know, may go to a drug store and call for any poison he chooses, and the apothecary has a right to sell it to him, provided the man explains the purpose for which he intends it, and leaves a name and address (supposed to be his own), and has a poison label attached to the package. The profit from the sale of such drugs is not sufficiently large to provoke determined opposition to the amendment I have suggested, whereby chloral and all potent preparations containing it, and all other deadly drugs and preparations containing them, shall only be dispensed on prescription. With the undivided responsibility placed upon physicians, it is probable, in my judgment, that the necessity for the existence of homes for the treatment of victims to the chloral and opium habits would soon disappear for want of support.—DANIEL LEWIS, M. D., in *N. Y. Med. Monthly*.

A PRACTICAL HINT ON THE PERFORMANCE OF TRACHEOTOMY.—Upon looking through various text-books and articles upon this operation, I can find nowhere any insistance upon the following detail—one important, as I believe, at any rate to operators of not large experience, and valuable, as increasing greatly the facility, and therefore the success, of the operation. The operator is usually recommended, standing preferably on the right side of his patient, after first determining the exact relation of parts, to fix the trachea with the left hand, the fingers on one side and the thumb upon the other, at the same time stretching the skin at the site of incision. The direction is at least distinct, but the manipulation is usually in effect very different. In all of many cases which I call to mind there has been a little (the only) trouble in the operation, and in some, considerable danger, delay, or anxiety, consequent upon the way in which the attempt is made to keep the windpipe steady, as customarily taught and performed: four fingers on the left side and the thumb upon the right side of the larynx press with more or less force immediately backwards to hold the organ in place, with the effect of considerably aggravating the dyspnœa (especially if an anæsthetic is not being employed), of flattening the pipe against the vertebral column to some extent, of in all cases increasing the depth at which the part to be incised can be reached, and frequently of failing to secure fixity of the larynx, which, likely to move with the slighest change of pressure, is pushed still more out of reach by the increased pressure made to secure it. Any or all of this inconvenience is the result of pressing backward with the fingers placed upon the skin immediately on either side of the windpipe.

The suggestion I have to make, and which, I have, no doubt, many surgeons have long ago thought of or adopted, although hitherto I have never seen it noticed, is so simple as to provoke a doubt as to its value, but anyone who tries it will, I think, find it so effectual in practice as to have no more doubt than I have as to its advantage. Let the surgeon place his hand, as widely expanded as possible, over the neck of a child in the position for tracheotomy; then resting the fingers upon one and the thumb upon the other side firmly upon the vein, as far to the side of the neck as they will reach, gradually draw in the thumb and fingers, and the skin (and loose tissue underneath) with them, towards the median line: as the sides of the windpipe are approached, a little more pressure, made in a backward direction, will place the ends of thumb and fingers in a

position in which they almost meet behind the larynx, which is thus firmly held by the encircling hand in a position in which all the great blood-vessels, etc. (which *have* been wounded) and the vertebral bodies (which, it is recorded, have *blunted a knife-point*) are far out af harm's way, the widepipe itself starting forward and standing out prominently under the skin, which is yet fairly stretched (and can be stretched more tightly) over the site of incision, and lying both as superficially as could be desired and as perfectly under control as possible. Lastly, and this I think is not altogether unimportant, this procedure may be adopted without producing more than the very slighest degree of discomfort in any ordinary child—the younger the more easily; and one is still able to make the skin as tight as possible; now, however, the necessary pressure is distributed all round, instead of acting directly backwards upon the tube so as to flatten or displace it. I have even been able without much trouble to make the thumb and fingers feel each other behind it by this means; while by the older method I have seen the production of undoubtedly a dangerous increase of dyspnœa. I may have overrated the danger, or underrated the utility of the usual method of fixation, but it has also seemed to me to be the only difficulty in an operation, which of course has none for experienced surgeons, but to others presents often some trouble, chiefly in consequence of the fact that the means adopted for fixing the part to be incised, being ill-devised though time-honored, are not only not to be relied on to secure that end, but, as I have tried to show, they directly tend to increase the depth of the wound of the trachea from the surface and the distress of the patient; and in all the accidents I have read of, and some that I have witnessed, this method has shown itself marked sometimes by danger, often by inutility. As to the barbarity of the *hook*, is it not an insult to the fingers of the *Χειρουργός*.—W. LEONARD BRADDON, F. R. C. S. E. (EXAM.), in *London Lancet*, November 26, 1886.

THE MILK TREATMENT.—(T. A. MCBRIDE, M. D., New York). The patient is to use *skimmed* milk, and *skimmed* milk alone; no other kind of nourishment.

The patient to take three or four times daily, and at regularly observed intervals, from two to six ounces of skimmed milk.

This must be taken slowly, and in small quantities, so that the saliva may be well mixed with it. The reaction of the milk to the test paper must be neutral or alkaline.

The first week is the most difficult to get over, unless the patient has a strong will.

During the second week two ordinary quarts may be consumed during the day. The milk must be drunk four times daily; at 8 a. m., at noon; at 4 and 8 p. m. The hours may be changed, but regular intervals must be maintained.

If the patient comply with these directions he will complain neither of hunger or thirst, although the first doses appear so very small.

The daily quantity may be increased to eight or more ounces.

If after having attained this quantity or more, and the patient gets worse, diminish the amount to the quantity used the first week, and increase more slowly.

Constipation at the beginning is a good sign. This may be remedied by warm water injections, or by the use of castor oil, rhubarb, addition of sugar of milk to the milk, or by taking some bicarbonate of soda at bed-time. If the constipation be obstinate, a little coffee may be added to the morning dose of milk, or towards 4 p. m., stewed prunes or a roasted apple.

If, on the other hand, diarrhœa results, and rumbling of the bowels is frequent, the milk is too rich or it is being taken in two large doses.

Feverishness is no contra-indication to its use. If the patient is very thirsty he may drink Clysmic, Bethesda, Poland or Vichy water. If he have a strong desire for solid food at the end of the second or third week, he may have a little stale white bread or toasted bread with salt, in the morning and again at four p. m. Once a day he may have some soup made of milk and oatmeal.

After continuing this treatment for five or six weeks it may be modified, by allowing the milk only thrice daily, and once a day steak or a chop. Raw meat digests more easily, and should be used in preference to cooked when possible.

If it be necessary to add a little salt to the milk in some cases, and in others to have the milk drank when very hot. If the patient become flatulent, buttermilk is often beneficial in small quantities.

[The above treatment is said to be very successful in albuminuria; also often indicated in diabetes. ED.]

—*Journal of Reconstructives*, Oct., 1886.

SULPHURETTED HYDROGEN IN THE TREATMENT OF PHTHISIS.—A new method of treating this fell disease has quite recently been suggested by DR. BERGEON, of Lyons. It is based on the assumption—now generally admitted—of the bacillary origin of phthisis, and is directed to bringing the effects of antiseptics (in this case sulphuretted hydrogen) to bear directly on the diseased lungs. For this purpose, carbonic acid gas, generated in an apparatus specially designed for the purpose, is saturated with sulphuretted vapours, by being made to bubble through a solution of the gas, and is injected into the intestines *per rectum*, particular care being paid to the exclusion of atmospheric air, the injection of which would be followed by a tympanitic condition of the abdomen, and various uncomfortable and undesirable symptoms. The mixture of gases undergoes immediate absorption into the blood contained in the hæmorrhoidal veins, and passes to the lungs, where it is eliminated, and so brought directly into contact with the bacilli-infected tissues. The gas is not eliminated as sulphuretted hydrogen, but is decomposed in the process, and none of the toxic effects which follow its inhalation are produced. Its injection, even in larger quantities, causes no discomfort if only the air be carefully dispelled from the container before allowing the gases to enter.

The most promising results are said to have attended this mode of treatment in cases of phthisis, even when advanced, at Lyons, Marseilles, and Paris. The method is now being tried in one or two hospitals in London, and the

results, so soon as they can be arrived at, will doubtless be made public. The idea is ingenious, and does credit to its inventor, and, without being unduly sanguine, it is quite possible that we may thus be enabled to intervene in otherwise hopeless cases of phthisis, and palliate, even if not cure.

One merit of treatment *per rectum* is that its nature does not allow of the undesirable extra professional publicity which is apt to be given to any essays of this description. It is preferable, from every point of view, that the public should only be cognizant of matured plans, the results of which have been verified and controlled by practical experience. Experimental medicine is not, and probably never was, in favor with the laity, although it is, in the absence of any fundamental laws of therapeutical science, as necessary a preliminary to discovery as the laboratory experiments which led to the discovery of chloroform or chloral.—*Med. Press and Circular*, Dec , 1886.

Analgesic Properties of Solanine.—Solanine belongs to a class of poisons which includes eserine, philocarpine, atropine, etc., the first physiological effect being to paralyze the nerve terminals of the non-striated muscular fibres. There are, however, certain differences in the particular action of solanine which Dr. Geneuil proposes to utilize in medicine. The alkaloid may be prepared from the fresh seed of potato, by means of boiling water, slightly acidulated with sulphuric acid; ammonia is added to the hot decoction, precipitating solanine and phosphate of lime. The alkaloid is then dissolved out with alcohol and evaporated to crystallization. These crystals are insoluble in water, but slightly soluble in ether, readily so in hot alcohol. It is colored orange by strong sulphuric acid, turning to deep violet and brown. With acids salts are formed. The hydrochlorate of solanine is obtained by dissolving solanine in alcohol, to which hydrochloric acid has been added, and precipitating the salt with ether. It forms a gelatinous body readily soluble in water In doses of from 1 to 3 grains its action is confined to the medulla and cord, but in larger doses the cerebral cortex is also affected, the symptoms being vertigo, heaviness, and noises in the ears. In poisonous doses there is violent headache, followed by delirium, cyanosis, and somnolence. Respiration is rendered deeper and slower; the pulse is not affected by the drug in medicinal doses. Its administration by the mouth in large doses is apt to give rise to nausea and vomiting, with a desire to defecate. In the stomach solanine is transformed into solanine and glucose. Generally speaking, the pupil is not dilated. Dr. Geneuil has found solanine of the greatest service in the treatment of sciatica and rheumatic neuralgia, in doses of from 3 to 4 grains daily, by the mouth or hypodermically. He has also used it in prurigo, cystitis, and in certain nervous affections where restlessness and insomnia were prominent symptoms. He has found it useful in acute dyspepsia and gastritis, lessening the pain and spasm, and good results have followed its administration in the obstinate vomiting of pregnancy. He recommends it strongly in the treatment of bronchitis, bronchial asthma, cardiac asthma and emphysema. Solanine, he says, may be prescribed without danger in large doses, and its use is not attended by the same inconveniences as morphine and atropine. It is particularly in lieu of the former that he finds it of service, especially in children.—*London Medical Record*, November 15, 1886.—*Jour. of Amer. Med. Association*, Dec. 18, 1886.

The Treatment of Rheumatism in the Boston Hospitals.—Dr. Francis Minot usually employs, in the treatment of acute articular rheumatism, ten grains of salicylic acid or fifteen grains of sodium salicycate, for an adult, every hour, or every two hours, until the pain and fever abate; after that, at longer intervals, according to circumstances. If there be indications of endo- or pericardial complications, sinapisms are applied, followed by fomentations, and quinine is given in two-grain doses, three or four times daily. In cases of suspected cerebral inflammation ice is applied to the head, with opium, chloral hydrate, aconite, etc., internally. The affected joints are simply wrapped in cotton wadding. Purging is avoided.

The diet during the acute stage consists chiefly of milk and farinaceous articles. Wine and other stimulants are ordered, according to the degree of prostration. The patients are kept in bed at least a week after all pain and swelling have subsided, and the temperature and pulse have fallen to the normal standards.

In the more chronic forms of articular rheumatism, reliance is chiefly placed on quinine and iron. In all cases care is taken during convalescence to prevent fatigue, exposure to cold, and errors in diet.

Dr. F. C. Shattuck uses a combination of the salicyl and alkaline treatment, with a view to—first, relief of the articular pain and swelling; and, second, the prevention of cardiac complications, the results of which are far more serious than are those of the inflammation about and in the joints. He finds that under the use of the salicyl compounds the joint pains and the fever yield more promptly and fully than under any other medication. Relapses are, however, common; and it would seem that, though the patient is made much more comfortable, his stay in the hospital is but little, if at all, shortened. There are good authorities who maintain that this treatment tends directly to lessen the liability to cardiac complications; there are other equally good and more numerous authorities who maintain that it has no such direct action. That the full alkaline treatment has some effect in averting and curing these complications, rests on evidence strong enough to make us listen to it; and the stay in hospital under its use is, if the statistics quoted by Professor Howard, in Pepper's System of Medicine, are reliable, rather shorter than under the salicyl compounds.—*Medical News*, Dec. 8, 1886.

Ory on the Treatment of Erysipelas by Carbolic Acid Spray.—The employment of carbolic acid in the treatment of erysipelas has been recommended for some time past. At a recent meeting of the Société Medico-Pratique, Dr. Ory communicated the two following cases, which serve to demonstrate the efficacy of carbolic acid spray, which were, in these

instances, the only treatment used. The first case was that of an infant of three months' old, suffering from erysipelas following vaccination. A fortnight had elapsed since vaccination, when DR. ORY was summoned. The little patient was feverish, depressed, and exhibited convulsive movements. The right arm was tumefied, there was a red patch about the size of the palm of the hand, in the centre of which was a vaccine pustule, covered by a scab, in process of desiccation. Collodion and castor-oil were applied to and around the red patch in order to check the spreading of erysipelas, and an antispasmodic treatment was followed during the night. Finding the collodion applications ineffective in preventing the spreading of the redness, DR. ORY had recourse to the treatment indicated by PROF. VERNEUIL. The child was wrapped in cotton-wool, carbolic acid spray was then applied during five minutes; 2 per cent. solution was used. There was considerable improvement, the convulsive movements ceased, diarrhœa disappeared, and temperature fell. On the following day only those parts where the collodion still remained were red; it was removed, and by the evening all traces of erysipelas had vanished. Rapid recovery without any relapse ensued. The number of applications of the spray was gradually reduced (4 in the 24 hours of the fourth day), and all treatment ceased on the fifth. The second case was that of an old man, aged 69. The patient was ataxic, subject to obstinate constipation. The peritoneum and gluteal regions were attacked by erysipelas. The carbolic acid pulverisations applied in the case above-mentioned had a satisfactory result. From the first evening the pain diminished after each pulverisation, and on the third the tissues had almost recovered their normal coloring; there was less fever. DR. ORY concluded by stating his opinion that antiseptic carbolic acid pulverisations may be used, to the exclusion of all other internal treatment, for combating erysipelas.—*London Medical Record*, Dec., 1886.

NEW REMEDY FOR CYSTITIS.—Having seen nothing concerning the new remedy for cystitis and hyperæsthesia of the genito-urinary tract, Pichi (Fabiana imbricata), and being very much pleased with it, I will report, briefly, its action in a few cases. The first case was one of cancer of the uterus, where the whole anterior part of the vagina was indurated and contracted—the patient having to urinate every half hour all night, and the pain would start the tears every time. I gave the following prescription: ℞ extract pichi ʒvj., liquor potass., ʒ ss., elixir aromat. q. s. ℥ iij.; a teaspoonful once every three hours. In less than two days—in fact the first night—she had to get up but once. She took the medicine irregularly, as required, until she returned home, which was three weeks after, and it controlled the painful urination completely. Neither did she have the backache, which had been a constant accompaniment heretofore.

Case 2.—A lady, with frequent and painful urination, having to get up four times at night. She had been overtreated by one of the too numerous class who see a cause for every ill that woman is heir to through a vaginal speculum. In this case the medicine acted equally kind and promptly, remedying the backache as well.

Case 3.—Man with a *mild* gonorrhœa. Stopped all scalding of the urine at once.

Case 4.—An old lady, aged eighty-three, who said it appeared very strange none of the doctors could do her any good. She had to get up several times at night to urinate, but she had an idea that there were no doctors except old men. I promised the medicine should relieve her in forty-eight hours. Because a neighbor had got along so well with fever, she became reckless enough to trust a young doctor's word, and was all right in twenty-four hours, and has continued so since.

I have tried local applications in two cases of vaginitis, and they were greatly benefited, and ceased using it. Am now anxiously watching for an old man, with prostatitis and cystitis, to come along. I owe so much to eclecticism, in the short time I have been investigating it, that I wish to inform the brethren of that school, concerning a new weapon of "specific" tendencies, and increased consumption will lessen the cost. I believe P., D. & Co. alone handle it now.

P. S.—Have considerably lessened the first-named dose; now give ten drops once in three hours.—*California Med. Journal*, Dec., 1886.

CROTALUS OR RATTLESNAKE POISON—ITS SPHERE OF ACTION AND USEFULNESS.—DR. ALFRED DRYSDALE in the Medical Press and Circular, Dec. 8, 1886, presents a scholarly article on this subject. Regarding the therapeutic application of crotalus he says:

The practical value of crotalus in the treatment of disease has been abundantly proved, if clinical experience is to be accepted as proof, which in the face of the great *post-hoc propter-hoc* dilemma must be considered as doubtful. All that can be said in this respect is that the data forthcoming are as reliable as those which have established the reputation of many of the reigning therapeutic favories. The main application of this remedy is in the pernicious fevers, where the whole mass of the blood is vitiated, probably as a consequence of the diminution or loss of vitality of the protoplasm composing the leucocytes. A condition is well known in cases of almost all the fevers, and in pneumonia, where the patient is so reduced in strength that he can only lie on his back, usually with eyes open; the hands are seen to be tremulous and in incessant motion—what is called carphology and subsultus tendinum being present—the tongue is dark-brown, especially in the centre, and conveys to the sensation a roughness like that of a brick; the pulse is extremely rapid (140, 150, or more) and irregular; muttering delirium may be present, but the patient is evidently too weak to utter loud sounds. This condition, known as "the typhoid state," whether supervening upon a continued fever, pneumonia, or mere senile asthenia, is well and successfully treated by drop doses of solution crotalus, 1 in 100, repeated every two hours. Most medical men have met with a condition of body, usually at the end of an organic complaint of long standing, such as Bright's disease, phthisis, mitral disease of the heart, etc., but sometimes merely from age added to want or deficiency of essential ingredi-

ents of the food even in young people. The patient at once strikes spectators as having a wretched aspect—the face is waxy and transparent, chlorotic in hue, restless in expression, the eyes bleared and sunken, the lips white and covered with sticky exudation; slight inju-ies, pressure of clothes, etc., are apt to produce ecchymoses; purpuric rashes, indolent suppurations, or even gangrene, are common. Extravasated blood is liable to make its appearance in almost any tissue, organ, or secretion of the body. Such a condition, whether following upon organic disease or due only to insufficiency or improper quality of the food (scurvy), is well treated by drop doses of crotalus solution (1 in 100); the blood is gradually brought to a healthy condition, where this is possible, and in other cases amelioration and prolongation of life may be confidently looked for. That form of Bright's disease which is a sequela of scarlet fever and other exanthemata is often benefited by crotalus. A certain form of headache—not severe in degree, and not increased by shaking or sudden movements of the head—usually present in persons of languid constitution and sedentary habits, and often accompanied with relaxed sore throat, has received much benefit from the drug where it has been impossible to remove the cause, *i. e.*, a relaxed condition of the system. It will be seen that crotalus is one of those substances which, though producing extremely violent effects in large quantities, has little effect in comparatively small doses, and, apparently, has little preference for individual organs; in this it resembles prussic acid, and is unlike most other violently-acting poisons, such as arsenic, which has a distinct elective affinity for the skin and stomach, or phosphorus, which selects the lungs and nervous tissues. Its sphere of usefulness must be looked for therefore among the graver maladies, where the whole blood mass is affected, rather than in slighter and more localized ailments.

ANALGESICS.—At the meeting of the Section in Therapeutics of the British Medical Association the debate on analgesics was introduced by DR. SPENDER, in a paper rather too long for such a purpose, but full of interest. After some introduction, he said we come to close quarters with pain in neuralgia, calculus in the ureter, gall-stones, gout, etc., and patients demand relief at all cost. In such cases opium, or its alkaloid, still remained our chief agent. In supra-orbital pain, however, it was of little use, while 10 grains of quinine, followed by a few doses of 5 grains, would cure. Gelsemium or chloral were not to be compared in these cases, especially when, as usually, there is a touch of malaria present. Again, in night-pain in a syphilitic patient, analgesics of such a kind give only temporary relief, while iodides will, after a few doses, permanently remove the suffering. So salicin and arsenic are relatively indirect analgesics in other cases. Iron, in myalgia and neuralgia, has a similar relative value. Bromides only dispose to sleep, and in slight pain appear analgesic; but if the pain is sharp enough to baffle sleep, it defies bromides. They bring the system into a placid state disposing to sleep, but if this is disturbed the analgesic charm is broken. He referred to doses, and illustrated the subject by the different effect in various quantities of tartar emetic, of opium, and morphine. Bleeding relieved vascular tension. Ergot raised motor force, and possibly sensation. He next urged that we economize our power by combining drugs, instancing morphine given with bromides, aconite with quinine, hemlock with several others, quinine with arsenic in herpes zoster, or with colchicum in gout, etc. He thought that, as surgeons have their instruments all in place, so as to find just what they want, so physicians should have a cupboard where all their analgesics could be seen in order at a glance, with hypodermic syringes and other means of employing them. He concluded with a recognition of physical analgesics, and the importance of recognizing not only the mental influence which by the sight of the dentist dismisses toothache, but the spiritual comfort which the presence of a wise, Christian physician may insensibly impart.

The president thanked DR. SPENDER and asked DR. BROWN-SEQUARD to follow.

DR. BROWN-SEQUARD then gave an account of his discovery that a jet of carbonic-acid gas or of the vapor of chloroform, projected forcibly on the larynx, produced anesthesia. Other agents will do it, but these are the best. After the larynx is thus anesthetized the influence extends to other parts, and he has rendered animals insensitive to pain all over by this method. The effect lasts a long time—twenty-four or even thirty-six hours—and that without the least effect on consciousness or interference with any other function. He considered it due to an effect on the superior laryngeal nerve. When this nerve was divided on one side, there was no anesthesia at all. He divided both, and scarcely any effect occurred on either—only just enough to be attributed to the other less important nerves.

The higher the scale of the animal the greater the effect. He had tried to apply it to man and had succeeded on himself, but the effect of projecting CO_2 on the laryngeal membrane is so exceedingly disagreeable he had found no one else able to endure it for a long enough time, and, of course, precautions must be taken to prevent its inhalation. He was still, therefore, searching for an agent suitable for use on mankind. Galvanism of the nerve sometimes acted in the same way, but was very uncertain, and sometimes useless.—*Med. Record.*

THE VENOM OF POISONOUS SNAKES.—The investigation of the poison which in the form of snake-bites kills nearly 50,000 human beings per annum in India alone, cannot fail to present many points of interest, and has just been undertaken by DR. R. NORRIS WOLFENDEN, whose results are published in the last part of the Journal of Physiology. The poisons with which he experimented were obtained from the Indian cobra, the scientific name of which is Naja tripudians, and the Indian viper, named the Daboia Russellii. In the report of the last Snake Commission, DR. WOLFENDEN tells us, MR. PEDLER, one of the commissioners, sums up the results of his chemical examination into the nature of the poison, with the remark that it is quite impossible to draw any deductions as to its nature, and he thought it was more than possible that the poison was a mixture of albu-

minous principles with some specific poison. Sir Joseph Fayrer and Dr. Lauder Brunton compared the action of cobra poison to the alkaloid conia. Blyth thought that the poison could be separated from the proteids in the venom, and that it was not thrown down with the albumens on the addition of alcohol. Walls, however, with whom Dr. Wolfenden agrees, ascertained that this is an error, and attributable to the circumstance that the alcohol used was not sufficiently pure. If to a solution of cobra poison absolute alcohol be added, a white precipitate is thrown down. After the precipitate has been thoroughly washed with alcohol, it can be redissolved in water, and the solution produces all the effects of cobra poison. Moreover, if dried cobra poison in a state of fine powder be added to absolute alcohol, and the mixture be frequently agitated, the alcohol will derive no poisonous property from the cobra venom; but if rectified spirit be employed, the water in the rectified spirit is capable of taking up a certain amount of the poison. This is just what might be expected of an albuminous fluid, and tells in favor of the view that the cobra venom is of a proteid nature. The observations and experiments of Weir, Mitchell, and Reichert upon the venoms of several American snakes tend to prove that the poisonous principle is resident in the proteid constituents. Dr. Wolfenden finds the venom is generally acid when quite fresh, but that it may become neutral when it has been kept for a few hours. Experiment showed that the dialysates of the venom, free from proteid, were quite harmless; but that if they contained any proteid they became toxic. The activity of the venom, though reduced, is not entirely abolished by the exposure to a boiling temperature. It is rendered innocuous by the permanganate of potash outside the body, as well as by tannic acid, metallic salts, and other agents which precipitate albumen. The albumens which Dr. Wolfenden finds are present in the venom of the cobra are: First, a globulin, which is always present, and probably kills by interference with the respiratory mechanism—that is, by asphyxia, and without paralysis, causing local inflammation, but not of great intensity. Secondly, an albumen resembling acid albumen, which is precipitated, together with globulin, by saturation, and which is in some degree dialysable; this proteid probably acts on the respiratory apparatus chiefly like the globulin, but less intensely. Thirdly, an albumen which is precipitated by sodium sulphate out of the magnesia filtrate, and appears to be serum-albumen; this is also toxic, and produces a kind of ascending paralysis, with fatal termination by suppression of the respiratory function due to paralysis of the respiratory muscles. Lastly, he found some traces of hemi-albuminose and of peptone. Similar compounds were found in the venom of daboia.—*Med. and Surg. Reporter.*

Management of Cases of Enlarged Prostate.—In the course of a paper in the N. Y. Medical Journal, Dr. F. W. Rockwell says:

"Three drugs are at the present time given with the belief that they exert a direct influence on the disease. I name them in order of their value, so far as I have personally been able to judge of their effects, or ascertain the estimation in which they are held by the profession. They are ergot, iodide of potassium, and chloride of ammonium. Of the first of these I can speak in terms of confidence, since I have seen as decided effects from its use as we ever do from therapeutic agents, and in cases where no other treatment was applied. I can not see why, on general principles, it should not act on the muscular tissues of both bladder and gland, and I give it accordingly, in full doses.

"One of my patients, who had an immense posterior and lateral hypertrophy, and was relieved of his first retention by the smallest catheter I own, after taking pounds of the drug for a year or two, was completely relieved of his symptoms, and that with no instrumental treatment, except that necessary to empty his bladder in a few attacks of retention. Improvement of a marked character was manifest during the first three months of treatment, and I have seen the same benefit in other cases, even where cystitis of a severe grade complicated the original disease. This drug I accordingly gave in most of my cases, watching my patient's general health, instructing him in the daily use of the catheter, where chronic retention exists, and also in irrigating the bladder if cystitis exists or is threatened; warning him to report any unusual appearances in his urine, watching its reaction and specific gravity, from time to time, for any indications as to treatment; impressing on him the danger of being placed in circumstances where he can not empty his bladder at will: also that he shun cold and damp, and protect his skin by suitable flannels worn next it the year through; that he be temperate in diet and drink, and especially as to quantity and quality of the latter, even with water, tea, or coffee, making his daily consumption proportionate to his experience as to his actual need, and warning him that an excess of fluid in his bladder will not be tolerated as in youth; and, lastly, I endeavor to have him acquire regular habits as to the time of passing water, especially if he has to irrigate or artificially empty the organ. Strict observance of these rules makes the life of sufferers from even advanced prostatic disease tolerable, and in many cases comfortable."—*N. W. Lancet.*

"Don'ts for the Sick-Room."—Don't light a sick-room at night by means of a jet of gas burning low; nothing impoverishes the air sooner. Use sperm candles or tapers which burn in sperm oil.

Don't allow offensive matters to remain. In cases of emergency, where these cannot at once be removed, wring a heavy cloth—for instance, like Turkish toweling—out of cold water, use it as a cover, placing over this ordinary paper. Such means prevent the escape of odor and infection.

Don't forget to have a few beans of coffee handy, for this serves as a deodorizer, if burnt upon coals or paper. Bits of charcoal placed around are useful in absorbing gases and other impurities.

Don't have the temperature of a sick-room much over sixty degrees; seventy degrees are allowable, but not advisable.

Don't permit currents of air to blow upon the patient. An open fire-place is an excellent means of ventilation. The current may be tested by burning a piece of paper in front.

Don't give the patient a *full* glass of water to drink from, unless he is allowed all he desires. If he can drain the glass he will be satisfied; so regulate the quantity before handing it to him.

Don't neglect during the day to attend to necessaries for the night, that the rest of the patient and family may not be disturbed.

Don't ask a convalescent if he would like this or that to eat or drink, but prepare the delicacies and present them in a tempting way.

Don't throw coal upon the fire; place it in brown paper bags and lay them upon the fire, thus avoiding the noise, which is shocking to the sick and sensitive.

Don't jar the bed by leaning or sitting upon it. This is unpleasant to one ill and nervous.

Don't let stale flowers remain in a sick chamber.

Don't be unmindful of yourself if you are in the responsible position of nurse. To do faithful work you must have proper food and stated hours of rest.

Don't appear anxious, however great your anxiety.

Don't forget that kindness and tenderness are needful to successful nursing. Human nature longs to be soothed and comforted on all occasions when it is out of tune.—*American Druggist.*

Methods of Inducing Labor.—Prof. Tibone (L'Union Médicale) suggests a modification of the method of Krause, which is, as is known, the introduction of an ordinary sound into the uterus, leaving it there until labor is established. Tibone's method is as follows: After taking all antiseptic precautions, the cervix is brought into view by means of a speculum, and then a special kind of sound is introduced. The author prefers the plain English bougie, No. 10 or 12. The bougie is held a moment in a warm mercurial solution, and is gradually softened; it is then introduced into the cervix, and slowly and gradually pushed up until it has entirely disappeared inside the womb. There is then placed upon the mouth of the womb a large tampon of cotton soaked in an antiseptic solution; the patient may then get up and keep about until the appearance of labor. This method is perhaps a trifle slow, but is sure, and on account of the softness of the instruments used there is no exposure to violent rupture of the membranes or to serious injury to the placenta. The author has used this method repeatedly, and always with satisfaction.

[Our own method of inducing labor may be of interest in this connection. It is safe, and we have found it a promptly effective procedure for the purpose:

1. Prepare a mercuric iodide solution (1 to 4,000) at a temperature of about 105° Fahr. Place the patient upon the back in convenient position for a prolonged douche. With clean hands and instruments, project a stream of the hot biniodide solution for fifteen minutes against the membranes. The preliminary douche thus used is important as an antiseptic as well as an oxytocic measure. Septic matter may be carried into the uterus from the cervix or vagina, on an instrument previously clean.

2. With a flexible uterine sound, rendered aseptic, carefully separate the membranes for a space of two inches about the os internum. This separation of the ovum from the lower segment of the uterus will be found perfectly practicable, and it materially hastens its expulsion. It provokes expulsive pains by rendering the ovum in part a foreign body.

3. Finally pass the aseptic bougie with the aid of a Sims' speculum and the latero-prone position. No tampon is required.]—*Amer. Med. Digest.*

Natural History of Tuberculosis and the Bacilli Theory.—Dr. R. B. Davy, of Cincinnati, has lately read two papers before the medical societies of that city, in which he thinks he has shown the infectious theory of tuberculosis to be supported in every respect by the natural history of the disease. He does not lay particular stress on the "bacillus tuberculosis," and speaks of the poison more as the "tubercular virus," but insists that, like all organisms, it is a creature of heat and moisture. From the fact that its appearance and extension are only noticed to occur in confined spaces, and its disappearance most favored in unconfined spaces, he concludes that the danger of infection depends more upon quantity than quality of poison. After extensively discussing the natural history and climatic treatment of the disease, he comes to the following conclusions:

I. That tubercular phthisis occurs most frequently and most fatally in warm or hot regions characterized by a non-porous soil and the ordinary accompaniment of excessive humidity of atmosphere.

II. That it depends upon a specific organism, which can be made to produce the disease by inoculation.

III. That the key to the introduction and development of this organism in the system is ordinarily some form of irritation.

IV. That the disease is plainly curable in all its forms except the acute, and even this may not always be fatal.

V. That to the predisposed it is communicable by infection through the medium of a polluted atmosphere.

VI. That the infection depends upon quantity rather than quality of virus.

VII. That on the open sea, where every condition favoring the development of tuberculosis is present, except the presence of tubercular spores, the diseose speedily disappears.

VIII. That the nearest approach to perfect immunity from tuberculosis is to be found on high mountains, where, on account of extreme rarefaction and accompanying dryness of the the air, the tubercular organism cannot exist. —*Med. and Surg. Reporter.*

The Action and Therapeutic Value of Vegetable Astringents.—In a report recently made to the Scientific Grants Committee of the British Medical Association, by Ralph Stockman, M. D., Assistant to the Professor of Materia Medica in the University of Edinburgh, the results of a series of experiments on the action and therapeutic value of

vegetable astringents is given, from which it would appear that these agents are of no especial value as remote astringents when applied through the circulation. The experiments were made with gallo-tannic (ordinary tannic), catechu-tannic, rhatany-tannic, gallic, and pyrogallic acids.

The conclusion of the author is that these substances do not contract blood-vessels even when applied locally, but, on the contrary, dilate them and accomplish hemostatic effects simply by their power of precipitating albumen.

They exist in the blood only in combination with alkalies, and in this form are entirely neutral in their action on the vessels.

Gallic and tannic acids appear in the urine only in combinations with alkalies, and the compounds thus formed are inert unless given combined with alkalies. These acids form albuminates in the stomach, which are not at all absorbed, or so slowly that their presence can not be demonstrated in the blood or saliva. If given in combination with alkalies, as gallates or tannates of soda and potash, they are rapidly absorbed from the stomach, and are excreted as such by the kidneys. The only influence they can have as hemostatics, when taken internally, is exerted by diminishing the alkalinity of the blood and thereby increasing its coagulability, and in this respect they are surpassed by all the stronger acids.—*Am. Pract. and News.*

Action of Drugs in Albuminuria.—An interesting communication on this subject was read in the Section of Therapeutics, at the Brighton meeting of the British Medical Association, by Dr. Robert Saundby. He pointed out the difficulty of foretelling what action drugs might possess on the renal processes in genuine albuminuria. The number of drugs with which he experimented was very large. The following are his chief conclusions: Alkalies used in the form of diluents—such as a quart of bitartrate of potash imperial (one ounce and a half to a pint), daily, gave distinctly favorable results in cases of chronic, persistent, and copious albuminuria. He has employed, also, citrate of lithia, bicarbonate of potash, ammonic benzoate, and bicarbonate of soda, and includes them in the favorable opinion. The beneficial effect was not due to the formation of alkali-albumen; for Esbach's fluid, which was the method employed, precipitates that form of albumen. Tannate of soda, or, rather, an ounce mixture of tannic acid and bicarbonate of soda, of each ten grains, with fifteen minims of glycerin, also gave good results. In one case the albuminuria was diminished one-half. Nitro-glycerin and fuchsin appeared to have no good effect. Digitalis and other heart tonics—caffeine, strophanthus, sulphate of sparteine, iron salts, acetate, sulphate, and perchloride—increase the amount of albumen passed. Apocynum was not found to have any diuretic action in drachm doses of the tincture, and it increased the albumen in two cases. Turpentine had no beneficial effect, though hæmaturia followed its employment in one-minim doses. Doses of the 1000th of a grain of bichloride of mercury were also inoperative.—*London Lancet*, Dec. 25, 1886.

Bichloride of Mercury and Tincture of Belladonna in Membranous Croup.—Dr. J. H. Jones writes as follows to the New York Medical Journal:

I have for some years been in the habit of treating this disease with a combination of corrosive sublimate and belladonna. These drugs are recommended for this complaint in almost every work on therapeutics, but I am not aware that they have ever been given conjointly. I have found that small doses of the bichloride (one-fiftieth of a grain), administered in conjunction with tincture of belladonna (two to five minims), every half hour for a child two years old, is a very successful method of dealing with this dangerous disease of childhood. The secret of its success is in its persistent administration, even when the symptoms are apparently most unfavorable. I have several times witnessed a happy termination to the disease when other practitioners with whom I was associated entertained scarcely a hope of recovery. It is advisable to commence the treatment by administering an emetic, so as to dislodge the already formed membrane. Probably much of the benefit derived from this mixed treatment is due to belladonna, and it is atonishing what large doses of this drug children can tolerate. During the progress of the disease the strength must be maintained by a liberally nutritious diet and stimulants, for I must say that when recovery takes place the patient is left very anæmic and weak. This is not very apparent while the medicine is being given, as every evidence of it is partially masked by the physiological effects of the belladonna.—*Canadian Practitioner.*

Salt Baths in Fevers.—Dr. Vavinovitch has made a number of experiments in cases of typhoid fever to determine the relative value of salt- and fresh-water baths, and formulates his conclusions as follows (Meditsinskoye Obozreniye, No. 14, 1886):

1. Salt baths reduce the temperature several tenths of a degree Centigrade more than ordinary baths.
2. The difference in the abstraction of heat is greater the first half hour, gradually becomes less, and is hardly noticeable at the end of three hours.
3. Evening baths reduce the temperature in a greater degree than do those in the morning.
4. Salt baths retard the pulse more than ordinary baths.
5. They also reduce the number of respirations per minute, rendering the inspiratory efforts deeper and more prolonged.
6. Salt baths increase the muscular strength in a greater degree than do fresh-water baths.
7. The patients feel better while in the salt bath and after its termination than they do when a fresh bath is given.
8. The difference between salt and fresh baths, as regards the slowing of the pulse and respiration, is not so great as to indicate any very powerful influence of salt baths on the functional activity of the heart and lungs.—*Med. Record*, Dec. 11, 1886.

Amyl Nitrite has resuscitated patients from collapse caused by cocaine injections.

The Medical Age.

Vol. V. DETROIT, FEB. 10, 1887. No. 3.

Original Articles.

A CASE OF CHRONIC PSEUDO-MEMBRANOUS BRONCHITIS.*

BY H. A. JOHNSON, M.D., L.L.D., EMERITUS PROFESSOR OF PRINCIPLES AND PRACTICE OF MEDICINE IN CHICAGO MEDICAL COLLEGE.

Pseudo-membranous bronchitis is rarely met with. In making this statement I exclude the persistence of a diphtheritic bronchitis and croupous pneumonia, in both of which diseases the expulsion of false membranes may occur. It is, perhaps, not always easy to make an absolutely correct differential diagnosis of these cases. This difficulty rests upon the fact that (1) membranous inflammation of the bronchi of an acute character, such as diphtheria, may become chronic. I have seen several such cases, but in all of them the acute stage had been well marked, and the chronic condition seemed to be only delayed convalescence. (2) Croupous pneumonia may certainly become chronic, but so far as my own experience enables me to judge, the membranous exudate, if present, disappears with the acute stage.

The literature of the subject is quite voluminous in titles, as may be seen by reference to the index catalogue of the library of the surgeon-general's office, but the number of cases is small.

Among the cases reported in our own country, one, by DR. W. C. GLASGOW, of St. Louis, in a paper read before the American Medical Association for the year 1879, is especially noticeable. In this article the author embodies the experience of several of the more prominent physicians of the United States.

DR. RICHARDSON, of New Orleans, "in a practice of nearly a third of a century," had "never encountered a case of plastic bronchitis."

DR. GEDDINGS, of Aiken, South Carolina, had "never met with a case." It should be remembered that DR. GEDDINGS had a very large experience in lung troubles.

DR. F. R. PORCHER, of Charleston, has seen one case.

DR. T. G. SIMONS, of Charleston, had seen one case, and had known of three others in the practice of other physicians.

DR. JEROME COCHRAN, of Mobile, says it is unknown in that section of the country.

DR. JAMES H. HUTCHINSON, of Philadelphia, had seen one case.

DR. H. I. BOWDITCH, of Boston, had never seen a case.

DR. R. H. FITZ, of Boston, had seen four specimens of casts. Does not seem to have seen the patients.

DR. T. PARVIN had seen no cases.

DR. GEORGE P. ANDREWS, of Detroit, had never seen or heard of a case in that region.

DR. ROBERTS BARTHOLOW had seen one well-marked case.

DR. J. R. LEAMING, of New York, had seen, in consultation, two cases.

DR. AUSTIN FLINT, SR., had seen three cases.

DR. GLEITZMAN, of Ashville, North Carolina, had seen one case.

DR. J. M. DA COSTA, of Philadelphia, had specimens of casts from five cases; cannot say whether he had seen more cases.

DR. ALFRED STATLE, of Philadelphia, sent report of one case.

DR. P. E. ROBINSON, of St. Louis, reported one case.

DR. MAXWELL reports one case.

DR. SAMUEL G. ARMOR, of Brooklyn, had seen "a few cases."

DR. FRANK DONALDSON, of Baltimore, had seen one case.

DR. HENRY GIBBONS, SR., of San Francisco, had never seen a case during a practice of fifty years.

DR. CHARLES DENISON, of Colorado, had never seen or heard of a case in Colorado.

DR. BAUMGARTEN, of St. Louis, reports one case.

These facts, collected by DR. GLASGOW in 1879, perhaps fairly represent the experience of the profession in America. I am, however, inclined to think that these meagre statistics of the practice of some of the most active physicians and careful observers by no means give a correct estimate of the relative frequency of the affection. I imagine very many cases are never diagnosed, or if seen and recognized they are not recorded, and therefore lost sight of.

In the records of the literature upon this subject there are reports by L. H. ANGEL, Chicago Medical Journal, 1859, pp. 501 to 504.

* Read before the Chicago Medical Society, December 20, 1886.

J. S. COHEN, "Transactions of the Pathological Society," Philadelphia, 1876.

AUSTIN FLINT, SR., Medical Record, 1874.

J. H. HUTCHINSON, "Transactions of the Philadelphia Pathological Society," 1874.

A. L. PAYNE, Stethoscope and Va. Medical Gazette, 1852.

J. C. REEVES, "Pathological Society," Philadelphia, 1859.

P. G. ROBINSON, St. Louis Medical Journal, 1878.

S. ROGERS, "Transactions Medical Society of New York," 1866.

L. SMITH, Medical Record, 1872.

T. H. STREETS, American Journal Medical Sciences, 1880.

E. D. WORTHINGTON, Canada Medical and Surgical Journal, 1876.

These, in addition to the case reported by DR. GLASGOW, comprise all the titles I am able to find in the United States and Canada. They evidently include also some of the cases referred to in the correspondence reported by DR. GLASGOW, and briefly summarized above. In some of these cases it seems to me there was simply an acute or diphtheritic inflammation running its course in a few days, and terminating in death, with such symptoms as are seen in the ordinary forms of diphtheritic inflammation.

Among foreign authorities the reports are also meagre. EICHHORST, in the last German edition of his work on special pathology and therapeutics, finds only 100 cases on record. The article in Ziemssen's Encylopedia gives a very clear statement of what is known as to the etiology and pathology of the affection. Among other writers, CHEYNE thinks old age predisposing; VALLEIX doubts this. GINTRAC says that the larger number of cases are observed in adult life. If we exclude the cases of diphtheria extending to the bronchi, this is true.

The male sex is predisposed to the affection, according to most authorities. Enfeebled health from previous disease, poverty, fatigue, exposure, are among the most common causes noted. Of course all these are so many synonyms for ignorance. The cause remains to be discovered. It may be some local colony of parasites. The relation of this disease, to the ordinary forms of membranous inflammation, in some of which bacteria are believed to be a pathogenic factor, suggests this, and perhaps makes it probable.

The relations to antecedent disease are by no means constant; neither diphtheria, nor simple bronchitis, nor pneumonia, except in rare instances, eventuate in chronic pseudo-membranous inflammation of the bronchial tubes. RUGEL says, "a special predisposition, or the influence of some special unknown agency, is always essential in addition" to the hypothetical causes enumerated.

The pathology of the affection is better understood. There is an exudate which coagulates upon the surface of the mucous membrane. This is often laminated by successive deposits. In the meshes of this coagulum a few leucocytes are found. The membrane proper is not necrosed, but continues to produce epithelium, and the exude is pushed off by the multiplication of this epithelium, which in turn degenerates, becoming fatty and purulent. It seems also to be certain that, while the mucous membranes do not become the seat of necrosis, they do become the seat of morbid processes, possibly similar to that which, in the endothelium of blood-vessels, determines the formation of a thrombus, and which in this case determines the formation of the plastic deposit.

The patient in the case which I beg to report is G. T. P., aged 37 years, a native of the eastern shores of the Adriatic. The family history on both sides is good. He enjoyed good health as a child and during early manhood; at 17 had a suspicious sore, but apparently escaped any other manifestations of specific disease; was for several years a sailor, but abandoned that calling at the age of 25. Has been for some years keeping a saloon. Eight years ago he gives a history of pneumonia involving the right lung; was six weeks ill. His general health from that time was good, till in March, 1884, when he "caught cold." At that time he was in bed ten days, had cough with expectoration, but does not know what was the character of the matter expectorated; had pain in the right side, locating it in the mammary region; this was not severe, but it continued more or less at intervals to the time of consultation. The cough and expectoration also continued during the spring and summer with, however, upon the whole a slow improvement till four days before first seen, when he thinks he caught cold, cough became more troublesome, and he spat up once only a little blood. He consulted me on August 23, 1884.

I found him a well built man, 5 feet 7 inches in height, dark hair and eyes, weighing, when well, 147 pounds, but now evidently much reduced—125 to 130 pounds. He stated that he had lost his weight since last winter; his appetite was poor; bowels torpid; urine normal in quantity but high in color; pulse, 75; temperature, 99.3°; respiration, 17 per minute; sleep fair; tongue coated. The cough and expectoration led him to fear phthisis, and the consultation was had with the expectation that there would be found evidence of that disease.

Upon inspection the chest was found to be noticeably flattened, but not more so on one side than on the other; over the right side and especially in the mammary region, vocal fremi-

tus exaggerated. Upon percussion there was found dullness over the whole right side, the left side normal. Auscultation revealed bronchial expiration over superior portion of right side, front and back. Left side normal. Cardiac sounds normal. The diagnosis then entered in the case book was "pneumonia not completely resolved, with bronchitis." He was placed upon tonics, syrup hypophosphites with hydrobromic acid.

September 9. Seventeen days later, he came again, and in every respect seemed to be better. No physical examination was made, but he was ordered to continue the medicine.

September 16. After quite a severe coughing fit and the expulsion of a mass of what was found to be a cast of a large bronchus, he spat blood. The hemorrhage persisted, and he was ordered extract ergot in capsules, and to continue the syrup hypophosphites and acid hydrobromic. The diagnosis was corrected so as to read "chronic pseudo-membranous bronchitis."

September 23. Bleeding continued two days after last visit, none since. Has had a great deal of pain in the inter-scapular region, not more on one side than the other. At times very tender to the touch at right of the eighth dorsal vertebra. This he describes as a "soreness." Has expectorated thin pieces of membrane since last consultation.

Physical examination. Find no dulness over the right side, or as the record says, "no noticeable difference in the percussion noted on the two sides." This was one month after the first examination, when there was dulness over the whole of the right side. The breath sounds over the right side feeble; in every other respect normal. Pulse, 68; temperature, 98.6°

October 2. Had been doing well until yesterday, when he again coughed up a large cast of a bronchus. (I may remark that all of these which I saw were probably from the first and second size tubes, and were from two to four inches in length). After this there came what he describes as pus streaked with blood, but the hemorrhage not copious. The ergot had been stopped; he thinks he was better while taking it, and asks to be permitted to return to it.

October 17. The casts continue to be coughed up; microscopically, they consist of coagulated plasma with a few leucocytes. Since the last date, October 2, he had been taking balsam copaiba and oleores. cubeb, with the ergot. I was under the impression that the copaiba had increased the plasticity of the exudate. Keeping in mind the specific history in his early life, I thought possibly that there might be some lingering impression still. I therefore put him on pot. iodid., 0.50, t. i. d.

October 25. Casts continue almost daily; continue pot. iodid. and add hydr. protiodid., 0.01, t. i. d.

November 5. His wife comes to the office, says that he has thrown off a large number of casts, and each is followed by copious hemorrhage. Has continued to take the ergot, and is now a little better, but weak. Continues pot. iodid. and hydr. protiodid., and in addition:

℞ Elix. calisayæ, 450.
Acid. sulphur. arom., 50.00 grams.
M., and take a dessertspoonful in water three times daily.

November 21. Patient comes himself. Has been better since last date. Has had no hemorrhage, or but little. Still a few casts; appetite has improved under the tonic. Bowels regular and sleep good.

December 26. Has been doing well till recently, but is now evidently losing in weight and strength. Hemorrhages from chest and occasionally from nose. Appetite poor. Bowels regular, or occasionally diarrhœa. This, however, does not persist. Has lancinating pains in the abdomen, more in the epigastric region. Coughs up very few casts, and these very thin and delicate. Has taken now the hydr. protiodid. since the 25th of October, 0.01 three times daily, and a part of the time 0.50 pot. iod. He has also taken, according to the amount of hemorrhage, ergot at his own discretion. Stop both ergot and hydr. protiodid. and take syr. fe. iodid., 1.00, t. i. d.

January 9, 1885. Has been feeling better for the last two weeks. Appetite fair, bowels regular, no more pains in bowels since change in medicine, cough less, expectoration mucus, occasionally tinged with blood. No free bleeding and no casts. Has some pain in chest, bilateral, and not marked at any one place. Pulse, 78; temperature, 98°; respiration normal. During the last week in January his wife came, said that he was still coughing a little, and that the expectoration was streaked with blood. I directed an emulsion of oleum terebinth., each dose containing 0.50 of the oil, three times daily, and to omit the ferri iodid.

February 4. He was visited at his home. He has expectorated no casts since December 26, 1884, but continues to cough sputum streaked with blood, and occasionally very slight epistaxis. Is still taking the turpentine; thinks the cough is looser than when taking the iron. During the past week has had a good deal of pain, intermittent in character, in the lower half of the right chest; has been in bed for last three days because of this pain.

Upon examination find the motions of the lower right side restricted; on percussion, dulness over the lower third of right lung, line of dulness seems to change with change of position; breath sounds indistinct, voice sounds ex-

aggerated. Friction sounds distinctly heard over anterior portion of chest when patient lying on back; less so when patient is sitting up. Diagnosed, pleurisy, question of effusion doubtful; a hypodermic needle was introduced with negative results. Chest was ordered to be painted with iodine. The turpentine was continued.

Dr. Frank S. Johnson, to whom I am indebted for the larger portion of these notes, had made this visit, and on his return from the patient, in the extreme northwestern part of the city, became seriously ill. I was unable to look after the patient, and asked my friend, Dr. S. D. Jacobson to take charge of the case. This was, I think, on the 5th of February, 1885.

I beg to add extracts from a letter from Dr. Jacobson, giving in a general way the further treatment of the case:

"As to my ideas about the therapeutics of this case I can be short. I am not troubled with an *embarras de richesse*, but rather find my excuse in the old saw, *simplex sigillum veri*.

"The case was to me one of great interest, having never seen a similar one in twenty-five years of practice, and finding little or no mention of such cases in the books at my disposal. True, I have had one case of bronchial croup, which terminated fatally in a couple of days (a man about 48 years old). But your case had already been under your care and observation for several months before I saw him.

"During the earlier months of my attendance he was about the same as when you saw him, intensely harassing cough with dyspnœa until relieved by the expulsion of greater or smaller masses of bronchial casts, which relief was generally paid for by severe hæmorrhages, which told on the little strength he possessed before, so that he not only dwindled down to a skeleton-like appearance, but when able to sit up his legs would not support him, and his hands grew so weak that he could not for some time lift the spoon to his mouth. During the summer of 1885, he improved some, but the fall and winter reduced him below his former level.

"Having no authorities to guide me in the treatment of such a rare case, I applied the general principles to the best of my abilities. I had two indications before me, (1) *indicatio symptomatica*, and (2) *indicatio morbi*. As to the first class, I had in view the cough, dyspnœa, hæmorrhages, weakening of all the organs and functions. Those I tried to meet by the exhibition of *solventia, expectorantia, narcotica, styptica et roborantia*. As to the *indicatio morbi* I was more in the dark, knowing almost nothing about the pathology or etiology of this disease. But I reasoned like this: Since our pathology seems to drift more and more into bacteriology, it is but just that our therapeutics follow suit and be more in the nature of bacteriacides and antiseptics. In this light I wish you to judge my prescriptions containing such poisons as arsenic, iodine, bichloride hydrarg. and iodoform, which appear in many of them.

"I must confess that my success was a great deal more than I dared hope for, and though I firmly believe in the *viz medicatrix naturæ*, I also believe that a physician can be, and should be in the words of Lord Bacon, '*medicus naturæ minister et interpres.*'"

During the summer of 1886, and again within the last few weeks, I have seen the patient, and find him perfectly recovered.

CHICAGO MEDICAL SOCIETY.

OFFICIAL REPORT.

Stated Meeting, Dec. 20, 1886.

The President, Edmund J. Doering, M. D., in the chair.

Dr. Hosmer A. Johnson read a paper on

PSEUDO-MEMBRANOUS BRONCHITIS.

(See page 49.)

Dr. N. S. Davis said: The disease which has been reported in the paper is one of rare occurrence. Having had occasion within the last two years to hunt up the literature on the subject, I found nothing more than has been stated in the paper, but I have no doubt that the disease is of more frequent occurrence than the reported cases would indicate. It is not always readily recognized; the question of diagnosis is not pursued with such closeness that the practitioner identifies it clearly, or gives it sufficient attention to recognize that it belongs to a rare form of bronchitis, and consequently the case is treated until the patient is well, or dead, and no record is made of it. In my own practice I think I have recognized at least four or five cases, and I remember some of them perfectly well, and the facts connected with them. I think the disease is more frequently met with in a chronic than in an acute form. The case that has just been detailed would come under the former class. In the majority of cases the disease attacks only a limited portion of the bronchial distribution. The cases that have been met with in an acute form, covering the greater part of the bronchial distribution, have been almost uniformly fatal.

The last case of this character that I treated was a young woman, a servant girl, who was attacked with general bronchitis. At first I supposed it was only a severe catarrhal bronchitis, but it created a cough unusually suffocating. There was but little expectoration for the first two days; subsequent to that she began to get, in the paroxysms of coughing, a little viscid, frothy mucus, and several times a

day there came mingled with it well-defined shreds of a membranous character. The patient belonged to a family that had marks of some specific influence of a hereditary character. In the progress of the case, during its acute stage, there were no complete casts, but shreds sometimes an inch-and-a-half long, as though they were torn loose and thrown off. In the later stages the membranous discharges ceased and there was a suppurative condition. She expectorated a copious purulent matter as in ordinary cases of tuberculosis, but there were no cavities of the lungs, and the structure gave no evidence of having been invaded. She finally became exhausted and died. I have seen one other case that I regarded as an acute attack of this character; a child between 7 and 10 years old. That also ran an acute course, and the patient died from suffocation from the persistent obstruction. The other cases that I have seen have been of the chronic character and apparently involved only a portion of the air passages. They would have attacks accompanied by feverishness and soreness which would go on to suffocating, violent paroxysms of cough, and in the midst of the cough would discharge more or less of the exudation. One case ended in the development of what has been called of late years fibroid phthisis. There was gradual contraction of one side of the chest, diminution of resonance, increased fremitus of voice, and purulent expectoration mingled with more or less mucus, and the patient died exhausted. The record of statistics shows that a large majority are of a partial character, involving but a limited portion of the bronchial surface, and these, though obstinate and apparently difficult to relieve, usually recover. I think that it is stated, also, that there is more than an ordinary tendency to involve ultimately the fibrous tissue of the lung and bring on that form of phthisis. If you examine the membrane under the microscope, you will find in the fibrillated material some scant particles of fat granules, and here and there a leucocyte, and when expectorated there is frequently an exudation of blood, but I think not often the amount reported in this case. I recollect very little, if any, blood following the expectoration of membrane in the cases I have had an opportunity of observing. Each layer of membrane tends to disintegrate, and when one has been thrown off another follows it, and this goes on, in the chronic form, indefinitely, unless there is a change of condition. In these cases, as in all true plastic exudations, there is some condition of the blood or of the vital properties that continues the existence and exudation of plastic material.

In regard to the treatment, I have nothing especially new to offer. I found that the chronic form was most benefited by ordinary anodyne expectorants combined with alteratives, especially of the mercurial class. In two instances of the chronic form the steady use of the alterative mercurial influence until there was a little swelling of the gum and a taint of the breath, then dropping it and using iodide of potassium with the more tonic class of expectorants, was followed with good results and ultimate recovery.

I remember one instance, I cannot say positively that it was of the true pseudo-membranous character, of a man whom I was called to see and who subsequently came to my office. He had an attack of the subacute character, involving, apparently, the whole of one bronchial distribution, which produced a very persistent and distressing cough with apparent suffocation. The man and his wife averred that in his coughing he threw off long pieces of a membranous substance several times, but as it was never saved I had no opportunity of examining it. In this case there was a well developed rheumatic diathesis, and I looked upon it as partaking somewhat of the nature of rheumatic bronchitis associated with plastic exudation. I put the man upon salicylate of sodium, dose 10 to 15 grains, accompanied first by ordinary anodyne expectorants to help allay the severity of the cough. It acted favorably, and not only his bronchitis but his rheumatic troubles disappeared, and he made a fair recovery. The character of the cough and their description of the expectoration led me to look upon it as a case of pseudo-membranous bronchitis, and I questioned in my own mind when contemplating the subject, whether in the true plastic exudation that persistently forms, dislodges, re-forms and keeps on doing so, if the patients were put upon full doses of such remedies as salicylate of sodium or ammonium, sufficient to effect a decided change in the quality of the blood, it might not give better results than those ordinarily used.

DR. ROBERT BABCOCK said: The paper is one of the most interesting I have listened to. It is needless for me to say, since such a man as DR. JOHNSON has seen but one case, and such a man as DR. BOWDITCH has never seen a case, that I have never seen one. In regard to the etiology, I would merely state that DR. DOUGLASS POWELL says this form of bronchitis may be observed in all ages from childhood to old age. He differs from the author of the paper in saying that it is more frequent in females than in males. He mentions the probability that there is a hyperinotic condition of the blood. The line of treatment pursued by DR. JOHNSON is interesting with regard to this point; after giving iodide of potassium and the mercurial salt in pretty full doses the character of the expectoration changed, becoming mucous and frothy, and it was not until these remedies had been given up and syrup of iron substituted that the plastic character of the bronchitis

reasserted itself. May it not be that the exhibition of the potassium iodide and the mercurial salt did overcome to a certain extent the hyperinosis which may have existed in this man's case?

DR. S. D. JACOBSON: It has been my good fortune to see, besides this instance of the chronic form, which I saw through the courtesy of DR. JOHNSON, one case which represented the acute form of this disease. It was a friend of mine, a man of about 47 years of age, who was accustomed to take great quantities of alcoholic stimulants. In the winter of 1871 he came to me and complained that for several days he had had some trouble with his pharynx, and he had expectorated a large amount of mucus. I inspected his pharynx, and found a condition such as might be expected from a man who was out of doors a great deal, who was an inveterate smoker, and a very convivial man. There were no symptoms of diphtheria; it was a case of pharyngitis or tonsillitis. Under the usual treatment it improved in a couple of days. About a week after he sent for me, and I found him with some fever and a very distressing cough. He expectorated great masses of mucus, and I recognized them as casts of bronchial tubes of the first and second order. At that time I had never heard of such a case. The next day I found him in great distress, and, after a long and tiresome cough, he brought up numerous quantities of matter, like the first casts I had observed, which I found to be of the third and fourth order of bronchial casts, and after that he felt relieved, but died on the third day afterward. I then saw a report in the Scandinavian Medical Archive* describing a case exactly similar to mine, except that the man was 34 years of age. On post-mortem it was found, by incising the chest, that it contained air over both lungs, and the bronchial tubes of the first, second, and third order all contained casts. The lung contained air mixed with mucus and pus. The trachea contained casts which terminated on the under surface of the epiglottis. The physician questioned whether it was an ascending bronchitis or a descending fibrinous exudation from the pharynx downwards, because in this case, as in my own, there had been tonsillitis about a week before the alarming symptoms set in, but arrives at the conclusion that the disease was primary in the bronchial tubes. I have thus been fortunate enough to observe this rare disease in two cases, one representing the chronic, the other the acute form, and both of them conforming to the rule laid down by DR. DAVIS, that the acute generally terminates fatally, while the chronic in many cases terminates favorably. Both of my cases were of the male sex, and both were rather given to alcoholic stimulants.

* Vol. iv, fasc. 4, 1872.

DR. E. FLETCHER INGALS said: I have had very little experience in these cases. It has never been my bad fortune to meet with a case of acute diphtheritic bronchitis, except those growing out of ordinary diphtheria, which are unfortunately frequent. I have treated three cases of the chronic form of the disease, none of them very severe. In each case there was, from time to time, expectoration of the croupous deposit, but I did not see them at any time when they were very ill. The history of the chronic cases is that they will have acute attacks from time to time, for months or years, running from ten days to two weeks. They almost universally recover from these, though occasionally they die of phthisis. The acute cases, as a rule, die, though from 25 to 50 per cent. are said to recover. A friend in the country sent me, last winter, casts from a large number of the bronchial tubes. I should say there must have been five or six branches to these casts. They had been coughed up by a patient of his, who subsequently recovered.

DR. C. M. FITCH said: Some eight years ago I had a case of this kind in a lady about to be confined. When I first saw her she was in an almost comatose condition, the face livid, and she was almost pulseless, the respiration fearfully obstructed, although air was entering all the larger bronchi. The woman died a few hours later, the child being born after she had become entirely unconscious. Four or five days later a child of the same family was taken with diphtheritic croup, the membrane passing down through the larynx, when DR. FENGER performed the operation of tracheotomy. I have no doubt that lady's case was one of acute croupous bronchitis.

Dr. H. A. JOHNSON, in closing the discussion, said: In reply to DR. BABCOCK, as to the influence of the potassium and mercurial salts upon the exudate, not only was the expectoration frothy, but, after using these medicines for some time, the casts became thin and evidently diminished in amount before they were thrown off. It was my opinion that the mercurial salts and the potassium had some influence in diminishing the amount of the exudate. You will remember, some time in December until February, there were no casts thrown off. Some time before that the patient had been taking potassium and mercurial salts. In estimating the frequency of this disease I have excluded cases which seemed to be of diphtheritic origin. I have seen several cases where there have been well-marked casts thrown off; in one case there were seven successive discharges from the bronchial ramifications of one lung. Those were diphtheritic, and were from a child who was recovering from bronchial diphtheria. I do not say that this is not, in its character, anything like diphtheria, but I think there is a radical difference in the membrane and that

which forms in diphtheria. It does not seem to me that we have the same tendency to disintegration that we have in diphtheritic forms of exudation; the exudate is more plastic. I have purposely not discussed the acute form, as I have not had an opportunity to study such cases. The notes here recorded were made in the presence of the patient, and they seemed to me worthy to be put on record.

DR. H. A. JOHNSON read a paper on

PNEUMATIC DIFFERENTIATION AND MEDICATION.

The question of pneumatic differentiation has been quite largely discussed by members of the medical profession during the last two or three years, but there seems still to be a good deal of mystification on the subject. I was unable to be present when the matter was brought before the society. I therefore beg permission to say a few words, which I intended to say at that time, and also to exhibit a contrivance for medication, by spray or vapor in condensed air. It is not my purpose to discuss the merits of pneumatic differentiation. The subject, if not the term, has been before the profession for many years, and various devices have been employed in its accomplishment. The manufacturers of pneumatic cabinets insist that the desired results can be realized only by placing a patient in a box with a tube, by means of which he breathes the air of the room, while the pressure on the surface of the body is either diminished or increased, by pumping air out of the box or into it. It is claimed that the result upon the body must be quite different from that reached by the use of the WALDENBURG apparatus or other similar devices, for the reason that in some way the movement of a body under the pressure of a force, we will say, of fourteen pounds against a resistance of thirteen pounds, in which the available moving force is one pound, must be quite a different process from that which is reached when the moving force is fifteen pounds and the resisting force fourteen pounds. They do not, it is true, state it in this form, but they do assert that, in case, we will say, of the patient breathing through a tube the external air, while the air in the chamber has been partly exhausted, so that its pressure is one pound per square inch less than the outside air, a *vis a fronte* is developed, by which the fluid and gases of the body are moved in a manner quite different from that which takes place when the patient sitting in the room breathes from a tank, air compressed, so that the pressure of the air breathed is one pound per square inch greater than that of the air in contact with the surface of the body. It must be evident that there is a fallacy in this claim.

We no longer use the phrase, *vis a fronte*, in in the sense of an active force when we apply it to such phenomena as those which occur in the case of a vacuum filled by in-rushing matter. It is well-known now that there is an active force from behind, a *vis a tergo*, which pushes into a partial vacuum sufficient matter to equalize the force, whatever it be, on the other side, or to produce an equilibrium of force. In the pneumatic cabinets there is, therefore, only another mechanical device for affecting the differentiation produced by the Waldenburg apparatus, and which has repeatedly been produced by breathing air from a tank into which it had been condensed by some means, such as air-pumps, water-pressure, etc. I am not alone in holding this opinion. DR. ISAAC HULL PLATT in a paper read before the American Climatological Association at its third annual meeting, is led to conclude that the effects of breathing condensed air from the cabinet, the patient sitting in the room, are the same as those produced when the patient, placed in the cabinet and the air-pressure reduced about the body, is allowed to breathe the air from the room. He says: "To put the matter beyond a doubt," that is the claim of a special value in the inclosure of the patient in the cabinet, "I have reversed the breathing tube of the cabinet, placing the patient on the outside and compressed the air within the cabinet. The effects produced upon the residual air and upon the pulse, as well as the subjective experience of the person operated upon, were found to be identical with those obtained when he was within the cabinet and the pressure reduced to the same degree."

I have made quite a number of experiments bearing upon the same question with results in no sense differing from those reached by DR. PLATT. The proposition to conduct medicated sprays into the alveoli of the lungs by the differentiation of air-pressure has been also ably treated by DR. PLATT, but I do not desire to consider it in this connection. I presume all admit that to the upper air-passages sprays may be applied with, in many cases, benefit. The use of sprays or vapors with condensed air is conveniently accomplished by the use of the cabinet, but this result can be and has been repeatedly reached, and just as easily, by other devices.

I have, within the last twenty years, resorted to several different contrivances for that purpose; an ordinary atomizing tube may be inserted through an opening in the tube from the tank, so that medicinal substances are thrown in the form of spray into the stream of condensed air inhaled. There are quite a number of ways of accomplishing this: That which I have more recently used, and which I submit to the society as a sample of what may be done, consists of a glass tube (I employ an ordinary percolator such as pharmacists use) to one end of which a breathing tube is attached and to the other end through a cork the atom-

izing tube and also the tube from my tank of condensed air. I at one time used a double tank, or rather two tanks, with an air gauge and stop-corks, so that I could maintain any required pressure in the tank from which my patient breathes. This tank may be a simple boiler such as is used in kitchens for heating water for circulation through the house, say 80 gallons or more, or it may be in any other form desired. As the pressure is never great, not more, usually, than one-half or at most three-fourths of a pound to the square inch, it may be made of wood. A strong, tight cask or barrel even will answer the purpose. The ordinary form of pneumatic cabinet—the New York cabinet or the Pine cabinet—may be used as a tank, but it is unnecessarily heavy and clumsy and expensive. As I have a Pine cabinet in my office, I use it as a tank, with an 8-inch air-pump for compressing the air. A copper or sheet-iron tank that can be obtained of any plumber at a small fraction of the expense of the cabinet is quite as useful. Any physician who has a spray-tube and glass vessel with two openings, a wolf-bottle or even an ordinary wide mouthed bottle, can provide himself with an apparatus just as useful as the pneumatic cabinet. By the use of a thin way stop-cock expiration may be made into a tank of compressed or rarefied air, or against a valve supported by a spring of any desired pressure, or through a narrowed opening, so as to regain force to expel the air from the chest. All these methods have been used to accomplish the same result, as expiration from the cabinet into outside air. The simpler the thing, provided it works, the better. The less mystery thrown around the whole subject, the better. I am quite confident that the physiological and therapeutical results obtained by the pneumatic cabinet are only such as may be reached equally well by the Waldenburg apparatus or by the still more simple means used some years since by the late DR. FRANK H. DAVIS, of this city. The apparatus is within the reach of anyone having a tank for condensed air for the purpose of atomizing or vaporizing medicinal substances, and requires no more skill or knowledge in its use than is required to administer narcotics, antipyretics or anæsthetics.

DR. E. FLETCHER INGALS asked DR. JOHNSON if he thought the patient would get more of the medicated vapor into the lungs with the compressed air than with ordinary air.

DR. ROBERT BABCOCK said: It has always been my opinion that pneumatic differentiation is essentially the same as the administration of compressed air, and I have not found reason to change this opinion. However, in justice to the inventor, I would like to ask DR. JOHNSON what he thinks of MR. KETCHUM'S assertion that the rarefication of the air around the chest of the patient by lessening atmospheric pressure allows the chest, and therefore the residual air, to expand, and with this expansion of the residual air lessens the resistance to the tidal air. In other words, that if the residual air did not expand the tidal air would meet with resistance from the residual air as from an air cushion; also, that this expansion of the residual air tends to force out any little plugs of mucus which may have obstructed the bronchials; that in this respect pneumatic differentiation certainly accomplishes more than could be done by the inhalation of compressed air.

DR. H. A. JOHNSON said: The claim of a special *value* in the cabinet as a means of differentiation is based upon a fallacy, viz.: the assumption of the *vis a fronte*. If you take the pressure off from the outside of the chest there is a kind of force that drives the fluids to the surface of the body. Suppose you reverse the case, place the patient outside and let him breathe the rarefied air, is there a *vis a fronte*? It certainly seems to me that there is no such thing. It is a *vis a tergo* that pushes air into the lungs, and a *vis a tergo* that pushes the air out of the lungs, and the equilibrium is maintained. As to the effect of the rarefied air in the cabinet upon the residual air, it is about the same as going up and down in an elevator of one of our tall buildings. In answer to DR. INGALS, it would seem to me that more spray may be carried into the bronchial tubes in the stream of condensed air than in air inhaled without differentiation of pressure. The discussion is simply upon the physiology and physics, not the value of pneumatic differentiation. MR. KETCHUM or some one connected with him, invented that term, but the thing itself, taking the name away, is by no means new.

DR. FRANKLIN H. MARTIN read a paper on

ELECTROLYSIS IN THE TREATMENT OF FIBROID TUMORS OF THE UTERUS,

with a description of DR. APOSTOLI'S methods.

He considered his subject under the following heads:

1. Consideration of the tumor.
2. Means of generating a current.
3. Electrodes, connections, and other apparatus.
4. Electrolytic action of the current.
5. Cataphonic action of the continuous current.
6. The difference in the local action of the two poles with powerful currents.
7. Operation and details of application, with a description of DR. APOSTOLI'S methods.

He divided fibroid tumors of the uterus according to their position, into submucous, interstitial, and subperitoneal; according to their condition into hemorrhagic and non-hemorrhagic. Any means of generating a continuous

uninterrupted current of electricity of 200 milliampère strength that is practicable will answer all the requirements for electrolytic treatment of fibroid tumors of the uterus. Dr. Martin uses a battery composed of 115 crow-foot gravity cells for this purpose, from which he can easily get a current of three or four hundred milliampères strength when properly charged. Storage cells and the dynamo were mentioned as possessing a future for this kind of work.

The very strong current that one now used in operations of this kind is made practicable by improvements in electrodes and conduction. Dr. Apostoli overcame the pain caused by high tension currents by using as a surface electrode a thick paste of potter's clay spread upon the abdomen with proper connections from a plate of soft metal upon its free surface. This answers the purpose perfectly, but has the objection of being very troublesome and very inelegant. Dr. Martin presented a decided innovation in this direction in the way of a surface electrode. From a soft plate of metal, the margins of which are bent so as to form a concavity upon one surface of an inch in depth, he has constructed an electrode by stretching loosely over this concavity an animal membrane, making the surface between the membrane and the metal water-tight. Through a stopper in the metal surface the inter-surface is filled with a warm saturated solution of chloride of sodium. This contrivance, with its membranous surface upon the abdomen, with proper connection from the metal surface, possesses all the advantages of the potter's clay electrode of Dr. Apostoli, with none of its disagreeable features. The author has been able to use a current of 150 milliampères strength by means of the above electrode without producing the slightest discomfort. The internal electrodes include a uterine sound of platinum with the intra-vaginal portion insulated, a sharp probe of platinum and iridium with insulating sheath and a number of needles insulated with hard rubber to within an inch of the point.

The electrolytic action of the current was dwelt upon at length, and given its due prominence.

The cataphonic action of the galvanic current was described, and to its action the author ascribed considerable prominence as aiding absorption of the fibroid growths.

Galvano-caustique is the name given to the local effect of the two poles when used intra-uterine in the form of metal probes. This effect is considered a great point of importance by Dr. Apostoli, and from which he expects to see a great advance developed in the treatment of the hemorrhagic fibroid tumors of the uterus. The effect referred to is only obtained from a current of 100 milliampères strength concentrated by means of an electrode of unattachable metal. The local effect of the two poles upon the lining of the uterus are distinctly different. The effect of the positive pole is to coagulate and harden the tumor that it comes in contact with, without changing the vitality of the tissue. The effect of the negative pole is to cause a liquefaction of the tissues in which it comes in contact, with considerable destruction of tissue.

The coagulating effect of the positive pole is utilized in transforming the hemorrhagic surface of the endometrium into a dry, coagulated surface that will not allow of a hemorrhagic exudate.

Three operations or methods of application of these powerful doses were described in detail:

1. Intra-uterine *galvano-caustic.*
2. Negative cervical galvano-puncture.
3. Galvano-puncture or needle operation: (*a*) extra-peritoneal; (*b*) intra-peritoneal.

The first operation (intra-uterine galvano-caustic) is employed for two effects: 1st, to check excessive hemorrhage by the local effect of the positive pole upon the endometrium of the uterus; 2d, for the reduction in size of the tumor by electrolytic action of the powerful current as it passes through the tissue of the tumor.

The second operation (negative cervical galvano-puncture) is performed for the purpose of establishing an artificial channel into the substance of the growth, to take the place of the cervical canal that has been distorted or obstructed to such an extent that it cannot be entered for the ordinary intra-uterine treatment. The effect sought here is the reduction of the tumor.

The third operation described by the author of the paper was the galvano-puncture, or needle operation proper. This is for the treatment of large sub-peritoneal fibroids that can only be reached by means of needles, and the electrolytic action only of the current is expected.

The author offered the following summary of conclusions:

1. A means of generating a continuous current of electricity, which can be increased from 10 to 250 milliampere strength, is necessary in order to obtain all the effects of the electrolytic treatment of fibroid tumors of the uterus.

2. The most distressing hæmorrhages from fibroid tumors can be healed by the local coagulating effect of the positive pole if applied intra-uterine.

3. The intra-uterine electrode, when positive, should be of unattachable metal, and should conform, as nearly as possible to the size and shape of the uterine canal, and have the intra-vaginal portion insulated.

4. When the cervical canal cannot be entered, a negative galvano-puncture should be

made into the presenting part of the obstructing mass of the tumor, and an artificial channel created, which is to take the place of the impenetrable uterine canal in all subsequent treatments.

5. The intra-uterine electrode should, in all cases, be negative, unless there is hæmorrhagia or excessive leucorrhœa, when the positive pole is required.

6. The strength of the current should be the strongest possible consistent with the desired therapeutic effect, and the toleration of the patient.

7. Cases of intolerance of high doses arrange themselves under the three following heads. 1, acute hysteria; 2, acute enteritis; 3, acute metritis, peri- or pari-metritis. The most tolerant are the deep uterine and profusely hæmorrhagic.

8. The ordinary duration of the séance should be about eight minutes.

9. The number of operations are necessarily dependent upon, and influenced by, the result to be accomplished. A severe hæmorrhagia can be checked in from four to five treatments, while a general reduction of the tumor necessitates many, varied, of course, according to the size and location of tumor. In many cases simply a restoration to health and a relief from the prominent and annoying symptoms must be accepted as the substitute for an actual cure.

10. The time of commencing treatment matters little if the tumor is not rapidly growing, and no excessive hæmorrhage is present. The operation should be intra-menstrual, if possible, but if hæmorrhage is continuous, operate during flow.

11. Extra-uterine puncture should be regarded only as a last resort, but every means of reaching the tumor through the uterus being impracticable, seek, if possible, to make the operation extra-peritoneal; should this, in turn, prove equally undesirable, use, as a final alterative, the abdominal puncture.

12. Strict antiseptic precautions should be carried out in this treatment, as in all others.

Dr. H. T. Byford said: I wish to express my admiration of the mastery which Dr. Martin has acquired over this method of treatment. It will, undoubtedly, take an important place among the surgical remedies for uterine fibroids. But the usefulness of any remedy must be determined not only by its effect, but also by its safety and convenience of employment. For instance, the radical treatment, or removal of the tumor, is a frightfully severe measure, and is reserved for cases that cannot be cured in any other way, while removal of the appendages is attended with considerable risk of life, and is reserved for those cases which cannot be helped by less dangerous means. So also this electrolysis, which is difficult of application and capable of harm, must be reserved for cases which cannot be cured by remedies more convenient and less hazardous. But before this, the safest of surgical procedures, can become the usual treatment for such cases, it must prove more efficacious than the still safer medicinal treatment. Fibroid tumors with hæmorrhage are the ones also most benefited by ergot and tampons in the majority of cases, and after the hæmorrhage is thus relieved there is no hurry in resorting to surgery. As to the effect of this treatment on the tumor itself, the evidence is not all in. The success of Apostoli, whose persistence is very praiseworthy, has been somewhat limited with regard to the removal of the tumor. The success of the so-called electrolysis upon fibroids seems to be no better, if as good, as that of ergot, and I doubt if it is produced in a very much different way. That electrolysis can break up the chemical constituents of a living tumor for any considerable distance from the electrode, without destroying the life and absorbing properties of the tissue in the course of the current, is a theorem that requires more than mere mathematical demonstration. We all believe, however, that it can stimulate the uterus to a contraction and partial strangulation of the tumor, and also stimulate the absorbents to remove it, and are prepared to have it proven to us that it will do so in many cases in which ergot fails. But it happens that the cases in which ergot is of the least use are those in which electrolysis is of most difficult application—the subperitoneal. And yet I have, as a rule, relieved the symptoms of the subperitoneal variety (excepting those immense neglected ones, too large for anything but removal) by ergot, which, even when it cannot cause compression of the tumor, can diminish its blood supply. I hope and believe, however, that the methods of Apostoli will enable us to manage safely cases that must otherwise require a dangerous operation.

Dr. William T. Belfield said: Dr. Martin has conferred a favor upon us in bringing Apostoli's method before us. During the last twenty-five years various attempts have been made to reduce fibroids of the uterus by the galvanic current; yet none of them have been recognized as successful, because, doubtless, as Dr. Martin very properly says, the current has been used in an ignorant, inaccurate, and bungling way. Apostoli's method is unique in the strength of the current used, as well as in the accuracy of its application to the uterus; whether this method will produce satisfactory results remains, as I think, to be seen, for Apostoli himself has been guilty of the gross inaccuracy which necessarily impairs the confidence claimed by his statements. Through Dr. Martin's kindness I had an opportunity to read Apostoli's book, in which are set forth his methods and the results of treatment on ninety-eight patients. The book bears the impress of perfect candor and truth, and yet, in

looking through the ninety-eight cases, which he records as fibroids of the uterus, most of which were benefited, it is evident that nearly all were not fibroids, but were cases of subinvolution. Many of them were women under 30 years of age, belonging to the poorer classes, and who were unable to secure proper rest and care after confinement. The clinical history, as well as the physical examination recorded by APOSTOLI, shows that they were plain cases of subinvolution. That the electric current has a value in such cases is unquestionable, and has often been demonstrated, but it is not accurate nor justifiable to apply the results obtained in treating subinvolution to the treatment of fibroids, for the distinction between subinvolution and myoma is as sharp anatomically and etiologically as it is clinically. It seemed to me that only four of APOSTOLI'S cases were evidently and certainly uterine fibroids; it is possible that six others might be reckoned, but certainly eighty-eight of the cases were, so far as can be judged from the record, cases of mere subinvolution. Yet the results secured in these four cases were most positive and decisive. In two of them the tumors were of enormous size. These two patients had been seen by PEAN, whose opinion was sought as to the advisability of operation. In one case he declined to operate on the ground that the patient could not survive an operation; in the other he was ready to operate, but the patient declined. Yet both of these cases of undoubted and extensive myomata were rapidly and greatly improved and the tumors reduced under APOSTOLI'S treatment. But four cases are not enough to justify a generalization, and I hope that DR. MARTIN will soon favor the Society with the results of the method in his own hands, for we may be sure he will avoid the sole error that can be charged against APOSTOLI.

DR. P. S. HAYES said: I have not given this matter a trial in fibroid tumors, but I have in the use of electricity generally. There are two factors in the treatment of fibroids by electrolysis—the chemical and physical and the physiological. How the physiological action of electricity operates is a question, but the chemical and the physical produce their effect by the splitting up of compound molecules and the chemical and physical liberation of at the poles. Certainly this factor (the chemical and physical) can be measured by the amount of chemical work done, which depends upon the strength of the battery, etc. It seems to me that a current even of 50 milliampères is rather strong to use in the beginning. I have had quite an extended experience, and can now call to mind six or eight cases in which even the slightest galvanic current would produce dizziness so that the patient would have to lie down for half an hour. I remember one case in which I used only half-a-dozen cells; the patient left my office staggering like a drunken woman, and finally had to go some place and rest. Afterwards I was unable to treat her except by allowing the current to traverse a very minute portion of her body. An induction apparatus the helix of which consists of thick wires and in which the current is generated by a battery of very large surface, gives a current which resembles somewhat the interrupted galvanic current; it stands midway between the ordinary induced current and the interrupted galvanic current of eight or ten cells. This current applied over a tumor sufficiently strong to produce vigorous contractions, will reduce the size of a fibroid when ergot has failed to do so, and apparently in the same way, by inducing forcible uterine contractions and of the abdominal muscles, tending to astringe it and squeeze out the life-blood which enters into it. It seems to me from my experience, that the injection of a few minims of 95-per-cent. carbolic acid into the tumor would produce a very similar local result to that produced by either the positive or negative pole. In the Medical Record that I received to-day I saw an abstract of the last paper of APOSTOLI in which it states that, while he has reduced fibroid tumors in size, relieved the distressing symptoms and made the patient very much better, yet he does not claim that he has ever absolutely removed a fibroid so that it could not be detected. I think that this method of treatment offers a good deal of hope in many cases where other means have failed, and I should not hesitate to try it myself and recommend others to do so.

DR. FRANKLIN H. MARTIN, in closing the discussion, said: I cannot agree with DR. BYFORD that this method of treating tumors should be reserved as a last resort. In careful hands it is entirely free from danger, pain, and (except in the last variety of operation described this evening) all disagreeable features, and it should not, therefore, be postponed until less efficient and more objectionable means have been employed, such as the hypodermic injection of ergot, its administration internally in large quantities, tamponing the vagina, cauterization of the uterine mucous membrane, and innumerable other less efficient means of relief. In my experience with the strong current I have never yet seen an untoward result, and I have employed currents varying in strength from 25 to 250 milliampères. APOSTOLI'S method should especially be adopted early for the checking of hæmorrhage from the uterine cavity. I cannot agree entirely with DR. BELFIELD'S conclusion in regard to DR. APOSTOLI'S results as reported in 1884.* My own results

* That DR. BELFIELD is in error in regard to this point will be made very apparent by the following summary of the case reported by DR. APOSTOLI and referred to by DR. BEL-

have been such as to make me very sanguine in regard to the value of strong currents for the relief of these difficulties, but as the object of the paper is the discussion of the method, and not the results, I must postpone the consideration of the latter until another time. I have never seen troublesome dizziness occur in the use of these currents in treatment about the abdomen.

[REPORTED BY G. EDWARD ROEHRIG, STUDENT OF MEDICINE.]

INTERESTING SURGICAL CASES.

BY HAL C. WYMAN, M. D., SURGEON DETROIT POLYCLINIC.

CASE 1.—*Removal of Scirrhus Tumor of the Mammary Gland.*—MISS G., æt. 27, American; seamstress by occupation. Has never had very good health because of asthma, due to polypoid degeneration of the nasal mucous membrane. She was very much emaciated, and has been, for many years, but has been able to work constantly until the present time.

About two years ago she first noticed pain and a small lump in the upper part of the left mammary gland. This pain has continued, and the lump has gradually enlarged, until it is about the size of a hen's egg.

The pain was sharp and lancinating, and at times of a dull, aching character.

She consulted DR. WYMAN as to the best mode of treatment. He found the tumor of the size above mentioned, freely movable beneath the skin with the mammary gland. The nipple on that side was a little more depressed than on the other side, but hardly enough to determine the kind of the mammary tumor. The veins in the integument of the diseased breast were larger than those in the sound one. They had a peculiar tortuous look, indicating an obstruction in the deep circulation of the gland. The axillary and cervical glands appeared sound; at least the most careful examination did not reveal any lupus or cords to the touch in these regions. There were no signs, except the tumor in the left breast, to indicate that her system was infected with malignant disease. Accordingly, DR. WYMAN advised an immediate extirpation of the tumor and the mammary gland, including any lymphatics that he might, in the course of the operation, find diseased.

The patient was given chloroform by DR. F. G. L. CONNELL, who removed, after the patient was partially under the influence of the chloroform, an upper and lower plate of false teeth, which should have been done earlier, as patients, when narcotised, are liable to be suffocated or suffer pecuniary loss by the dislodgment of the teeth. The instruments were dipped in an aseptic solution, sponges were wet with it and the breast and axilla carefully washed before any incisions were made. An incision was now made across the breast from right to left, about six inches in length., and embraced a sweep of the knife around the areola about the nipple, so that the latter came away with the tumor. The skin was now dissected upwards until the superior margin of the mammary gland was reached, when the fingers were thrust beneath it, and the entire mass, including tumor and gland, was quickly torn from its attachments to the mammary fascia. Three arteries required ligation. Aside from this, the hemorrhage was trifling, owing, no doubt, to the way in which the numerous small arteries and veins entering and emerging from the tumor had been torn rather than cut asunder. The cavity was carefully sponged out with hot water to check any oozing of blood. An incision was made from the most inferior part of the cavity, lately occupied by the tumor, through the integument, for purpose of drainage, and to facilitate thereby primary union of the wound. This plan is usually pursued by DR. WYMAN, and has given most flattering results, his patients often being convalescent on the eighth day after the operation (*vide* "A New Method of Operating for Tumors of the Mammary Gland," Detroit Lancet, Nov., '85). Through this opening a rubber drainage tube was passed. The tube was cut long enough to drain the fluids of the wound entirely free from any dresssing that may be applied. Again the sponges, wrung out in hot water, were used to carefully remove all traces of blood. The ends of ligatures were drawn through the opening of the wound, after which the edges were brought together and six silk sutures applied. An antiseptic ointment was then smeared on a sheet of fine white rice paper and placed over the wound, over which a thick layer of cotton was laid and covered by a tight bandage. In about an hour after the operation the patient complained of a sharp lancinating pain in the wound, and was given ¼ grain of morphine, which at once eased the pain. Three hours after I visited the patient, and found her resting comfortably. I noticed some oozing from the drainage tube, which showed clearly the use of such a tube to keep the cavity dry, thereby encouraging the wound to unite by first intention.

FIELD: 94 cases were reported; 15 of the cases had never borne children. Of the remaining 79 cases, where subinvolution of the uterus was impossible, we find four pedunculated subperitoneal tumors in which error of diagnosis was not probable. Of the remaining 75 cases, 9 measured from 10 to 21 cm., and the accompanying descriptions of the cases can leave no doubt in an unprejudiced mind in regard to their being large fibroid growths. The full description in detail of the remaining 66 will convince anyone who will take the pains to peruse them that at least 44 are well-defined fibroids. This leaves but 22 cases of the 94 reported in which there are not distinctive characteristics described, which definitely distinguishes them from simple subinvolution of the uterus.

CASE 2.—*Operation for Abscess of Mastoid Cells.*—MRS. S., æt. 22; occupation, maid servant, and by birth a German. Has been in America six years. Married two years, and at this writing is in the ninth month of pregnancy. Has had no hereditary predisposition to scrofula nor cutaneous affections. Has been in excellent health until about five weeks ago, when she complained of having a pain in her right ear. Her appetite became poor immediately, her bowels irregular, and her sleep much disturbed. The pain was intense, spreading rapidly to the entire half of the head. A physician was called, who pronounced it neuralgia, and could give her no relief. Three days after the commencement of pain a purulent discharge appeared through the meatus auditorius externus, ushered in by chills and fever, with swelling and inflammation, which appeared from the outset over the mastoid process. The temperature was 103.5°, and pulse 120. DR. WYMAN diagnosed the lesion as abscess of the mastoid cells, resulting from otitis interna, and decided to operate. An incision one inch long was made through the soft part down to the bone parallel with the long diameter of the mastoid process, and immediately a thin, bloody fluid escaped, relieving the œdema of the tissues back of the ear. The bony wall of the mastoid process was now broken through by drilling and gouging with the bite of one arm of a pair of ordinary forceps. DR. WYMAN has often used this instrument for this purpose, and considers it better adapted for breaking down the mastoid process than the gouge made by instrument dealers, because it is not necessary to use a mallet in breaking through the usually thin and friable wall of bone, which is quite honey-combed by disease before the operation is deemed necessary.

Pus flowed slowly from the broken bones. The wound was thoroughly cleansed with an antiseptic solution and a drainage tube inserted. The appetite was good the day following; pulse, 87; respiration, 20. She micturated a good deal, and her countenance commenced to assume a more healthy appearance. The wound was cleansed, and tube re-inserted. There was still a good deal of discharge, though of a purulent character. The third day I found the pulse to be 84; respiration, 20. Heart was regular, sleep better, appetite good, and discharge about the same. I was sent by DR. WYMAN again the next day, and found the discharge much less and the wound healing nicely from the bottom. About a week after, the discharge was found to have disappeared, and the opening was closed. Hearing in affected ear was so impaired that a watch could not be heard when removed from the head.

CASE 3.—*Phlegmasia Alba Dolens.*—MRS. W., æt. 38; German by birth. Has been in America about six years. Has had eight children, all of whom were born easily and without much pain. Three weeks after birth of last child she complained of pain in the lower part of the abdomen, accompanied by a rise of temperature and an acceleration of the pulse, the temperature reaching 103½°, and pulse 120 per minute. Complete loss of appetite, nausea, constant thirst, hot skin, bowels constipated, and pain during micturition, were all marked symptoms, preceded by shivering. Pain was first felt in lower part of abdomen, and then in the calf of the left leg and foot, and gradually worked its way up the limb until the whole was involved. In about twenty-four hours after first pain the limb began to swell and became very œdematous. A physician was consulted, and he treated her on the expectant plan, but without any good results. DR. WYMAN first saw the case about five weeks after the birth of child. The leg was found pale and shiny, and the lochial discharge was diminished, and was of a glassy, brownish appearance. She was placed on a lounge on her back, where better light could be obtained. A duck-bill speculum was inserted, a curette was passed about three inches into the womb, the cavity of which was carefully scraped of all the placental remains that were found adherent to its walls, after which a solution of corrosive sublimate and carbolic acid (hg. cl. cor., gr. j; acid. carbol., gtt j; ad aqua Oj) was used to cleanse out the cavity. This was used with a swab. She was then carried to her bed, and a suppository of opium, gr. j, and calomel, gr. j, was introduced to allay pain and promote antisepsis of the vaginal and uterine fluids. With this unusual treatment of paying particular attention to the pathological condition of the uterus, DR. WYMAN has been very successful. He holds that the main trouble in many cases of phlegmasia alba dolens originates in the intra-uterine decomposition of small particles of placental and membranous remnants, resulting from an influx of air into the cavity of the uterus, which sets up a putrefaction and developes mysterious entities known as ptomaines. His treatment aims at the *fons et origo* of the disease.

BEEF-TEA.

BY GEORGE SUTTIE, PHARMACIST, DETROIT, MICH.

There are very few people who have not had some experience with beef-tea. They or their friends have required, fancied they required, or been told perchance by their family doctor, that they did require "something nourishing," in their sickness or convalescence, and, of course, beef-tea was immediately suggested as the most "nourishing" article with which they were familiar. There were strong reasons for justifying the popular fallacy—for such we

have to confess it—it had been long taught at every medical school that beef-tea must be nourishing, since it was made from beef, and the students were further told the most approved method of making it so as to extract *all* the nourishment of the beef. Of course the laity in turn got the benefit of this teaching as faithfully as it was given. Then came the now familiar extract of beef to still further clinch our belief in the nutritive value of beef-tea. Were we not told how nutritious it was, and that a certain number of ounces of "extract" was equal to an equally certain number of pounds of beef? Of course this was the statement of the manufacturers, and we might believe it or not; but what could we do when the eminent physiologist, DR. CARPENTER, was quoted as saying that "one pound of Liebig's extract is sufficient to produce 70 pints of good beef tea, of which each pint contains the soluble constituents of one-half pound of beef." We notice, now that our attention has been drawn to his statement, that he was careful to say *soluble* constituents. He did not say, indeed, he has distinctly disclaimed ever having intended to mean that a pint of the beef-tea was equal in food value to one-half pound of beef, but his language was misconstrued by beef extract manufacturers to mean so, since it suited them well, and the mere fact that DR CARPENTER'S name was attached to it was sufficient to command for some time the unquestioned endorsement of the medical profession. Much light has been thrown on food products since then, however, both with reference to their absolute nutritive values and their actual values as cooked foods in the stomach. The latter has been almost entirely obtained as the result of many and elaborate experiments, recording the behavior of these foods in contact with the digestive ferments.

Beef, of course, as its position among our food products entitled it, has received very much attention, and very much has been learnt concerning it. It is very humiliating to acknowledge that our confidence has been misplaced, and to learn that the old familiar beef tea is almost entirely devoid of nutritive matter, and with it are included the average beef extracts, such as Liebig's extract, Valentine's meat juice, Brand's essence of beef, etc., which are evidently similarly prepared, or at all events, represent very little food value.*

We will have a better idea of the truth of such a sweeping statement, if we first of all consider what are the constituents of raw beef.

They are briefly as follows:

Organic:

1. Soluble in water, but coagulated by boiling; albumin, highly nutritious, and in the digestive process is converted into peptone.

2. Soluble in water and not coagulated by boiling. Chiefly excrementitious matter products, such as creatine, creatinine, carnine, urea, lactic acid, with a very little of the nutritious substances, peptone and muscle sugar.

3. Insoluble in water.

(*a.*) Insoluble albuminoids, commonly called fibrin, highly nutritious, in digestion converted into peptone.

(*b.*) Fibrous or connective tissue converted by long boiling into gelatin; of less nutritious value than the last.

(*c.*) Fatty matter—valuable only as a heat producer.

Inorganic:

Mineral salts. Of the saline constituents the phosphates alone are important as true foods; unfortunately the calcium and magnesium phosphates are almost insoluble in water, and the potassium phosphate may be said to be the only salt that approaches to a food value, since the chlorides and sulphates have little effect except upon the secretions.

From the above it will be readily seen that the albuminous or proteid substances, which are the true food constituents of beef, are either entirely insoluble in water or are rendered so by heat.

Concerning the "wide-spread misapprehension among the public in regard to the nutritive value of beef-tea," to quote the words of Sir Wm. Roberts:*

"The notion prevails that the nourishing qualities of the meat pass into the decoction, and that the dry, hard remnant of meat-fibre which remains undissolved is exhausted of its nutritive properties, and this latter is often thrown away as useless. A deplorable amount of waste arises from the prevalence of this erroneous notion. The proteid matter of meat is quite insoluble in boiling water, or in water heated above 160° F. The ingredients that pass into solution are the sapid extractives and salines of the meat, and nothing more, except some trifling amount of gelatine. The meat remnant, on the other hand, contains the real nutriment of the meat, and if this be beaten to a paste with a spoon, or pounded in a mortar and duly flavored with salt and other condiments, it constitutes not only a highly nourishing and agreeable, but also an exceedingly digestible form of food."

Beef-tea can only be regarded as an agreeable stimulant or tonic. Its palatability, however, is a very great recommendation—in very many cases it will be found to be the only restorative which the stomach will retain. The only method of producing a really nourishing or albuminoid food, which will be soluble and capable of being served as a soup or tea to the in-

* British Medical Journal, August, 1885.

* "Digestive Ferments and the Preparation and Use of Artificially Digested Food."

valid, is by treating the article to the action of pancreatin, and thereby convert the albuminoids or proteids to the digested or peptone form. The extreme solubility of digested products detracts from their acceptability to the healthy. To them they appear thin and watery—they miss the sense of substance and solidity characteristic of their ordinary food. But to the weak invalid without appetite this sense of substance or thickening is generally an objection, and they take with more ease an aliment which they can drink like water. Peptonized beef-tea may be very easily prepared by means of 'liquid pancreatin,' as placed upon the market by the leading manufacturers of pharmaceutical preparations. A still easier method is to use the peptonized extract of beef now coming into notice, and which already has almost superceded the old extracts of beef for extemporaneous use in the sick room.

This beats the Faith cure: "The Baltimore American publishes the following: Ten years ago MRS. ADA MARTIN, living in a small town in Ritchie County, punctured one of her limbs so severely as to cause permanent paralysis of it and deprive her of her power of speech. During the period of her affliction she has been making crazy quilts, and endeavoring to obtain patches from prominent men. PRESIDENTS HAYES, GARFIELD and ARTHUR sent her patches, and a day or two ago she received a patch from PRESIDENT CLEVELAND, with his compliments autographically expressed. Her pleasure at the event was so great that she jumped up suddenly, and in doing so knocked a revolver to the floor, causing it to be discharged. The ball entered her paralyzed limb, and the shock removed the paralytic effects and restored her speech. Ever since the occurence she has had the use of her tongue, which for ten years has been silenced. The physicians say she will have the use of her limb as soon as the bullet wound is healed." We may now expect to hear of all the deaf and dumb asylums and hospitals for the crippled and paralyzed laying in a stock of assorted revolvers for therapeutical purposes.

DR. WEIDEMANN, of St. Petersburg, is credited with recommending the use of the curette as the safest and most expeditious means of removing the fecundated ovum, prior to the third month of gestation—when such removal is imperatively demanded by the condition of the woman. There are, it is feared, many physicians who will welcome improvements in this line of practice, and they will, themselves, judge of the imperativeness of the demand.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., FEB. 10, 1887.

Notes.

A Plattsburg, N. Y., correspondent informs us that quite a breeze is being stirred up in that city and vicinity, by the talk and threats of the paternal ancestor of a twelve-year-old boy who, some five or six months since, while stealing a ride on an out-going train, fell on the track and incurred fracture of the right humerus, and has now non-union of bone at the place of fracture. Finding such to be the out-come of the case, the surgeon who had charge of it proposed an operation, at his own expense, with the intent of restoring the lost union, if possible. To this the father is reported strenuously object, as the arm has not come out at all as he had been promised. He avers, at the same time, that he has been advised by several physicians to whom he has shown the arm to prosecute for damages, and that certain lawyers have agreed to take up the case and carry it through for one-half of what he can recover, and also that a moneyed friend has promised to aid him in his suit. This correspondent further says that if an issue is brought in this case he will promptly keep us advised in regard to its progress. Cases of this nature are of universal professional interest.

The Atlanta Med. and Surg. Journal says that during a recent murder trial in Macon, DR. E. G. FERGUSON was put on the stand. He refused to testify, saying that his was expert testimony, and physicians in this State received no compensation for such. JUDGE SIMMONS said it was true that the State did not make any provision for paying physicians for their expert testimony, but directed the doctor to proceed. The ruling of JUDGE SIMMONS is quite different from that made by JUDGE C. C. FULLER, of Mecosta county, in the case of State of Michigan *vs.* VANIMMANS. Here the judge held, when a physician refused to testify on the ground that the evidence would be expert evidence: "After many years' study and observation, I decide that a physician's knowledge is his stock in trade, his capital, and we have no more right to take it without extra compensation than we have to take

provisions from a grocery without pay to feed the jury. The court rules that the witness is not compelled to testify."

The Midland Medical Miscellany has learnt that a young lady in Missouri society "playfully" bit a young gentleman who had been quizzing her about some jewelry. The bite subsequently proved to be poisonous, and the young gentleman only just escaped with his life. It is further stated that in Missouri County, where this last event occurred, another member of the softer sex had bitten a young man some time ago—presumably "playfully" also—with the result of causing his death by blood-poisoning. Two lessons may be learned from this: First, that the septicemia recorded as occurring in rabbits after hypodermic injection of saliva, does not imply that the saliva was specially septic; and secondly, that young ladies from Missouri would appear to be more in place in the physiological laboratory than in the drawing-room.

This is another of the many habits which have such a hold upon humanity. The Br. Med. Jour. mentions three cases of the habit. The body of a lady, aged sixty-two, was examined, and it was found to be greatly emaciated, not weighing more than fifty pounds, owing to the continued use of chlorodyne, which it was shown she, as well as two sisters who resided with her, had been taking for years. The jury returned a verdict of death from continued doses of chlorodyne.

Congratulations to DR. HAL C. WYMAN, of this city, on his appointment as one of the commissioners of State Charities and Correction. GOVERNOR LUCE has, in this instance, shown unusually excellent judgment in his selection of an appointee. DR. WYMAN possesses natural endowments and acquired qualifications which will make his incumbency of this honorable and responsible position a credit to himself and a benefit to the state.

The Canada medical journals continue to be spasmodically distressed over the fact that members of the profession in good standing think their exploits of sufficient interest to the public to warrant them in giving detailed accounts thereof to the secular press. These things have a tendency to make rival practitioners very tired, and demand the attention of the authorities constituted to deal therewith.

"Willow Lawn," DR. JENKS' private hospital for the treatment of diseases peculiar to the female, was opened by a formal reception to the local profession, on the 24 ult. The institution is equipped in a fashion quite abreast of the times. It deserves, and will, unquestionably, receive the proper kind of support.

DR. EUGENE SMITH, of this city, has returned from another of his periodical trips to Europe. He was this time accompanied by his bride, and was absent four months, which time was chiefly spent at the medical centres on the continent. He has resumed both his public and his private eye practice, at the Detroit College of Medicine and his office, respectively.

The Lancet defines "moderate drinking" as that which consists with a clean tongue, a good appetite, a slow pulse, a cool skin, a clear head, a steady hand, good walking power, and light, refreshing sleep, and asserts that "odd glasses of beer and spirits in a forenoon do not come within the range of moderate drinking."

According to DR. ROBERT MCC. LORD (Med. Record) when, in breech presentations, the head cannot be delivered soon enough to guard against asphyxia, air may be freely admitted to the child's mouth and nostrils, by gentle traction on the posterior vaginal wall with a Sims' speculum.

The following Bee-hive was discovered in the Weekly Medical Review:

Be regular.	Be attentive.	Be good.
Be prompt.	Be quiet.	Be kind.
Be busy.	Be careful.	Be polite.
Be decided.	Be truthful.	Be honest.

DR. WOOD, of the Therapeutic Gazette, fears that in cases of ulceration of the stomach, or bowels, pepsin given *per os* may enter the blood and cause septicæmia. This is getting the thing down pretty fine.

Medical Progress.

THE NERVOUS AFFECTIONS OF CHILDREN AND THEIR TREATMENT BY COD-LIVER OIL.—I am old enough to remember how infantile diseases were treated forty or fifty years ago. During my novitiate in medical practice I enjoyed the friendship and kindly assistance of a general practitioner who belonged to an earlier generation. He had a large practice and was much esteemed, and in any difficulty he was ever ready to give me his advice.

One of my earlier cases was one of long-continued convulsions in an infant. My medical senior advised the use of leeches: the child died, and at the post-mortem (I was assisted by the son of the old doctor) the brain and its membranes were found perfectly blanched, as white as milk. When the old man was told of it he was surprised, but a few weeks afterwards a similar case occurred in his own practice. Leeches were applied, the child died whilst the leeches were on, and the post-mortem revealed a similar exsanguined state of the contents of the skull. He comforted the distressed mother by assuring her that the leeches had spared her child all the horrors of a death by convulsions. And so the old doctor went on, and I

have little doubt if he had been now alive he would have gone on with his local depletion.

Although we have got far in advance of this treatment by local depletion in the treatment of children's diseases, yet I doubt if we have progressed to the same extent as we have in the treatment of illness in the adult. There is still with some the dispostion to give calomel, to apply cold water to the head, and to follow a more or less antiphlogistic routine. In the treatment of consumption we have moved from antimony and Epsom salts to quinine and iron, and cod-liver oil; and in cases of pleurodynia from bleeding to tinctura ferri; but in infantile diseases the progress halts, the old errors still influence us, and the little patient cannot protest or complain.

There is no doubt that the diseases of infants have some characteristics in common with those of adults. The same types may be found in both, but with marked differences, differences which have their origin in the very essence of children's existence. The infant up to the age of puberty is simply a growing animal; all the powers of its nature are devoted to the purposes of growing and developing, and it is little liable to illness (zymotic diseases excepted, which are not essentially infantile diseases) if its surroundings of air and diet are such as to enable it to meet the strain upon its powers, the strain connected with its growth and development. These illnesses are mostly of a nervous type, of which laryngismus stridulus may be taken as an example. After puberty and during the sexual period the purpose of the creature is to propagate, and its diseases are apt to be associated with the vaso-motor system, and will demand the use either of bromides of iron according as the action of the vaso-motor nerves may require to be regulated by a sedative or a stimulant. When the sexual organs are beginning to decline, and the eliminatory organs are less active, then another type of diseases crops up, and we have gout, or affections allied thereto; it is now the time for depurative treatment.

In infancy, we say, all the powers of a child's nature are concentrated upon the necessities of growth and development, and in considering what materials are required to maintain this attention has been too exclusively directed to the quantity of gross substance required, as if it were a house we were building, and could tell how much brick, and mortar, and wood would be required. Thus if any illness occurred during dentition it was generally thought more *lime* was wanted; but it is forgoiten that when a "cell" is formed it not only implies an expenditure of so much albumen and so much salts, but also of so much nerve-power, so much *vis vitæ*. The cell contains more than the chemist can detect; the expenditure of this nerve-power is very great and costly, and if the builder neglects to supply the material to meet this demand we shall have nerve-exhaustion, which will show itself by irregular spasmodic movements or convulsions.

If we take a general view of the diseases which belong to this early period of life, this period of growth and development, we shall be struck by the one special character—they are all more or less convulsive, either as general convulsions, the commonly recognized convulsion-fit of infants, or the convulsive inspiration of laryngismus stridulus, or the dyspnœa of what has been called "rickets of the chest," or later on of chorea and epilepsy. All these have probably their origin in the great function of its young life; it is struggling, striving with all its might, to grow, all its energies are concentrated on this one necessity, and it is often carrying on the battle under adverse influences.

These general remarks being premised, I would offer the following propositions for consideration.

1. In the process of the growth of new tissues there is a great expenditure of nerve-power, and also a disappearance of heat, which assumes some form of potential energy.

2. The exhaustion consequent upon this expenditure first shows itself at the age of three or four months (before dentition) in a nervous headache which is apt to be mistaken for the first stage of meningitis; later on, if dentition is going on easily and rapidly, that is to say, if the gums are full instead of showing one tooth at a time, we may have laryngismus stridulus; still later, what is called "rickets of the chest, but which is probably a nervous asthma from exhaustion of the pneumogastric and respiratory tract, supervenes; and subsequently, when the growth of the limbs takes place, the great strain is on the spinal nerves, and the child is liable to chorea.

3. All these diseases are the result of the exhaustion of special nerve-centres engaged at the time in some new and special development, which development takes place as it were in in successive segments or portions. In the first three months the special senses are evolved, and we have pseudo-meningitis: if these spmptoms are treated wrongly convulsions will ensue, and death will seem to justify the diagnosis. Between the fifth and ninth months the teeth appear, and we have laryngismus stridulus. From nine to twelve months the stomach and digestion are developing, and we have a form of asthma called "rickets of the chest." Afterwards the limbs grow markedly, and we have chorea. All these troubles I take to be the result of nerve exhaustion.

4. The disappearance of heat and expenditure of nerve-power are best met by the exhibition of cod-liver oil. The starchy and saccharine foods may have sufficed for the formation of the fatty tissues (the child may be quite fat), but are not serviceable for supplying nerve-power and for replacing the heat which disappears during growth. For these purposes it is necessary to exhibit some animal oil.

5. The due exhibition of cod-liver oil will therefore not only cure these ailments, but should in a great measure prevent them.

The nerve exhaustion referred to is not of the whole system, but of those nervous centres engaged at the time in providing nerve-force for the growth and functional development of certain organs. It has been suggested (by Sir W. Gull and Sir J. Paget) that single nerves may become insane, and here we have special nerve-centres becoming "hysterical."

Laryngismus stridulus is apt to occur when several teeth are coming forward at the same time, when the development is taking place more rapidly than the nerve-centres can supply the force necessary. My friend the old doctor used to score the whole range of the gums: nothing could be more cruel. If we could for a time arrest the growth of the teeth so that the nerve-centres should have time to recruit them-

selves, we should do wisely. Those teeth are growing not beyond the strength of the child, but beyond the power of the nerve-centres employed in the business. What is wanted is some material which shall supply the potential energy, and make good the heat which has disappeared. Perhaps the notion of the Scotchwoman who said "cod-oil fat is easily squandered" may really be the secret of its adaptability to these cases of nervous exhaustion Anyhow, the improvement is remarkable and immediate, and equally remarkable is the liking of the child for the oil. The chief obstacle is the dislike of the mother or nurse, who will tell you she is sick every time she takes the cork out of the bottle. How often disappointment may arise from this circumstance it is not easy to say, but certainly if any other bottle of medicine is ordered the nurse is apt to think she has sufficiently fulfilled her duties if she administers regularly from one of the bottles, and it is sure not to be the bottle of oil. The more to secure the confidence of the nurse it is well to tell her that the oil is mixed with some medicine, and to prescribe equal parts of oil and a colored syrup (such as syrupus croci); you may in this way hope to insure that the "nasty stuff" is given regularly. The *rationale* of the treatment of laryngismus stridulus with cod-liver oil does not so much concern us as its remedial value. I believe if there is such a thing in medicine as a specific, this is one. I would suggest that the oil is not alone serving the purpose of supplying the requisite animal heat, but that this heat is transmuted into some form of energy equivalent to what I have called nerve-force. Is it not for this reason that such a large percentage (22) of fat goes to the composition of nerve tissues? There is thus always a large supply of material close at hand, and available at once for a sudden extra demand.

For a long time I used to be puzzled because my little patients were in some cases apparently fat enough, and I did not feel inclined to give cod-liver oil. We do not know what is the natural standard of fatness in any given child, nor do we know what determines the laying down of fat in one case and its absorption in another. Starch and sugar may be sufficient for making fat to be stored up, but we may want something with the mobility of cod-liver oil, which shall not have previously to go through complicated chemical and fermentive changes before it can meet the extra and heavy demand for nerve energy in any particular emergency.

It is true that in all books and notices in the periodicals the use of cod-liver oil is recommended, but it is generally burried amongst a host of other remedies, some of them absolutely deleterious, so that the special remedy, cod-liver oil, is apt to be lost sight of, or it is given under the impression that laryngismus is a rachitic complaint as suggested in a most admirable lecture by SIR W. JENNER. It will greatly strengthen us in our judgment and simplify our treatment if we can bring all these different forms of convulsions under one head.

A convulsive fit, however sudden apparently, is always preceded by symptoms indicating brain-suffering; if the little patient's brain were assisted early by appropriate treatment, I believe we should see very few cases of convulsions or meningitis. Recently DR. WILKS has pertinently remarked that when we have a case of meningitis in a child what we want to know is what was the condition of the brain in the time antecedent to the attack. My answer is that the brain has been growing or working beyond its strength, and the exhibition of animal oil would have staved off that attack. The inflammation is the end of the illness, just as we see pericarditis occur at the end of an exhausting illness in an adult; the convulsion is the outcome of a long process of half-power, it corresponds to a delirium in an adult. It has been said that the measure of the efficiency of the family doctor should be that the family shall be kept free from all serious diseases, and I verily believe that by judicious foresight, by helping the little patient to carry on the one only duty of its existence—to grow—all these nervous spasmodic affections, which are often the cause of the most serious alarm, may be most effectually prevented, and it will only be in hospital practice that we shall have the opportunity of studying them.—FREDERICK F. ANDREWS, M. D., M. R. C. S., in *Practitioner*, Dec., 1886.

NOTES ON ANTIFEBRIN.—DR. J. L. R. WADSWORTH, of Collinsville, Ill., reports the following case showing the results obtained by antifebrin in malarial fever:

I received a telegram, calling me to the bedside of my daughter, in Kansas City, Mo., November 23, 1886, and found her suffering with an attack of continued malarial fever, that had reached the twenty-third day, under the excellent care of DR. SCHAUFFLER, of that city. DR. SCHAUFFLER had considered the case a mild one up to the twentieth day; but at this time the conditions were more serious. Temperature now ranged from 101.8° to 104.9°; pulse, 104 to 120; patient restless and sleepless. Medicine now failed to meet expectation. Quinia racked the stomach, not only in antipyretic, but in tonic doses. Antipyrin was followed by great depression, and with but little effect upon the temperature, although its previous use in this case had given the best results. These remedies had to be abandoned; and frequent spongings with water, and the internal administration of peptonoids, milk and whiskey, iron, ergot, and bromidia, were resorted to, to meet indications, with, however, but slight improvement for a few days. On the thirty-fifth day heart-failure threatened early dissolution. Thorough alimentation and stimulation were now pushed. Peptonoids (beef, milk, and gluten), ʒ j, with McMunn's elix. opii, gtts. v., every four hours, alternated with whiskey, ʒ j, with tr. ferri chlo., gtts, slightly broiled beef (which was relished) and water-toast, as would be taken by the patient. On the thirty-seventh day there was still no change for the better; the temperature was 104.2°. Pulse weak, irregular, and very compressible (so much so that it was with difficulty counted), and ranging from 120 to 148. DR. J. D. GRIFFITH was asked to unite with us in the management of the case, and on the second visit suggested the use of antifebrin—a remedy entirely new to us, of which he had recently procured a small sample while in New York City, at the suggestion of DR. A. A. SMITH, who assured him that it could be given under the most unfavorable conditions of the heart's action; and

we decided to use it. I gave it with the greatest care, accompanied by hourly observations of the temperature and pulse. Throughout the time of its use no change was made in the treatment last indicated, and with the exception that, as on the thirty-eighth day, a slight exacerbation of fever, followed on the thirty-ninth day by a decided one, was noted. Quinia was administered, at first hypodermatically, and later by enema. I could observe, however, no effects on the temperature from its use, but the exacerbations ceased.

It would seem, from the data obtained in this single case:

First, that antifebrin in five-grain doses, reduced the temperature as promptly as either quinia or antipyrin had previously done in this case.

Second, that, notwithstanding the very unfavorable conditions for exhibiting antipyretics, such as we have so far been familiar with, antifebrin gave no evidence of any depressing influence upon the system.

Third, that the effect of a dose of five grains upon the temperature commenced in about one hour from the time of administration, and continued for from three to seven hours, averaging a little less than four hours.

Fourth, that temperature was lowered from 1.3° to 4.5°, averaging a little over 2°.

Fifth, that the pulse-rate was lessened proportionate with the fall of the temperature, following the latter about one hour, both at commencement and termination.

Sixth, that the pulse-rate was lessened from two to sixteen beats, averaging about six.

Seventh, that recurring exacerbations of fever disturb the action of antifebrin; and, in the above conclusions, I have tried to eliminate the results of this disturbance, and enumerate only its effect on the fever without the marked exacerbation.

Finally, fully recognizing that "one swallow does not make a summer," I still offer this observation to the profession, with the hope that others may be led to investigate the drug, and more fully determine its value; and if it should be proven to be a non-depressent antipyretic, it will rank among the most valuable drugs which we possess.

REPORT OF NINE CASES OF SYPHILIS TREATED WITH SYRUP TRIFOLIUM COMPOUND*.—By JOHN GODFREY, M. D., surgeon in charge of U. S. Marine Hospital, Louisville, Ky. As can be seen, the dosage was moderate, the object being to treat as many cases as possible with the supply on hand, twelve five hundred cubic-centimeter bottles, kindly furnished by Messrs. Parke, Davis & Co. The results were not established as absolutely as was desired, the patients, as a rule, feeling themselves in such condition as to decline further treatment.

W. A., negro, aged twenty-two years; duration of disease, four months. Symptoms: Fever; great debility; osteocopus; neck, body, and inner aspect of thighs seat of pustular syphilide; fauces and pharynx inflamed; cervical glands enlarged. Treated forty-four days. Dose, five cubic centimeters (about seventy-five minims) three times daily. Gradual subsidence of pains and clearing up of skin. Appetite and strength returned to normal. Patient discharged much increased in flesh.

A. W., negro, aged nineteen years; duration of disease, six months. Symptoms: Evidences of initial lesion; iritis of right eye; feet and hands swollen; joints stiff and painful. Treated forty-seven days. Dose, five cubic centimeters three times daily; atropia drops. General improvement marked. Iritis improved, but not cured. Patient discharged at his own request.

J. F., negro, aged twenty-one years; duration of disease, three months. Symptoms: Indurated bubo; says he had sore; no sign upon inspection; osteocopus; frontal headache severe; has gonorrheal complication. Treated thirty-five days. Dose, five cubic centimeters three times daily; mild injection for clap, bubo injected with carbolic acid. Improvement from the first. Headache cured; bubo yielded without suppuration. Gonorrhœal rheumatism supervened, giving way less rapidly. Deserted, under the impression that he was well.

M. O'B., white, aged thirty-four years; duration of disease, four years. Symptoms: Large rupial sore, six by ten centimeters, below point of right scapula; numerous signs of previous syphiloderm. Been largely dosed with potassium iodide. Treated forty-two days. Dose, five cubic centimeters three times daily; poultice to remove scab; iodoform ointment. Ulcer began healing in a few days, and went on till but a vestige was left.

C. K., negro, aged twenty-three years; duration of disease, two years. Symptoms: Thin pustular syphilide on body and part of thighs; enlarged prostate; tenderness along perineal raphe; no rectal trouble. Treated ten days. Dose, five cubic centimeters three times daily. Prostatic symptoms disappeared by the fifth day. Eruption subsided in part. Deserted.

M. F., white, aged thirty-three years; duration of disease, one year. Symptoms: Mixed eruption, principally on nates and thighs; night pains; been in bad health since date of chancre. Treated eighteen days. Dose, five centimeters three times daily. Improved at once. Eruption nearly gone by the tenth day. Deserted. Had no pains and no eruption.

J. S., white, aged thirty-six years; duration of disease, thirty days. Symptoms: Hard chancre near frenum; induration behind corona, at dorsum; signs of recent rash on body; enlarged glands; osteocopus. Treated thirty days. Dose, five cubic centimeters three times daily, increased to ten cubic centimeters; potassium iodide in gradually increased doses. No abatement of ostealgia till treatment was changed.

W. B., negro, aged twenty-three years; duration of disease, eight years. Symptoms: Large rupial sores on body and limbs; little pain, but great feebleness; submaxillary and inguinal glands enlarged; laryngitis and bronchial catarrh. Treated eighty-four days. Dose, five cubic centimeters three times daily; potassium iodide, 0.33 gram, increased to two grams. Sores greatly improved in a few days. Medicine stopped on account of pneumonia. Resumed, with little or no improvement, until

* A case of long-standing scrofula was treated at the same time, with the same medicine. Improvement was marked in a short time, but, like so many of the others, the patient deserted.

potassium iodide was added. Patient discharged at urgent request, apparently well.

H. H., negro, aged twenty-six years; duration of disease, five years (?). Symptoms: Mixed syphilide plaques on back and thighs, squamopustular on elbows; pustules and small ulcers on nose and cheeks; iritis; fauces inflamed; rawham pigmentation; glands enlarged; fever; irritating cough. No primary treatment. Treated ninety days. Dose, ten cubic centimeters three times daily, increased to twenty cubic centimeters; syr. ferri et pot. tart., calomel; potassium iodide, 0.25 gram, increased to three grams thrice daily. Skin lesions yielded promptly and iritis improved; other symptoms grew worse. No sleep without anodynes. Calomel on the twelfth day, potassium on the fifteenth. Great improvement. Saw patient six months after discharge. Appeared well.—*Am. Pract. & News.*

PARALDEHYDE, URETHAN, HYOSCINE, AND HYPNONE COMPARED.—DR. WEBBER has had an opportunity of testing these new hypnotics in the cases of many patients in the Adams Nervine Asylum, U. S. A. Paraldehyde has, he considers, advantages over chloral. The immediate effects are less unpleasant. It very rarely causes headache on the next day; sometimes patients have a sensation of fullness or pressure in the head for a few hours after waking. He gave it in one case of doubtful disseminated sclerosis, where the patient had been taking chloral in large doses, not measuring the doses, and had been injuriously affected by the drug. The paraldehyde gave, in this instance, better and more prolonged rest; the patient partially recovered his mental powers and some measure of strength. The paraldehyde was continued several weeks, in nightly doses of forty minims. The chief objection to paraldehyde is its disagreeable odour and taste, and also the odour it imparts to the breath. DR. WEBBER does not remember having met any unpleasant symptoms arising from its use; but he has never seen a case in which it has been used habitually for a long time. Whilst sixty minims is a large dose, a dose of eighty minims has occasionally failed to cause sleep. Urethane is much more pleasant to administer than paraldehyde, having scarcely any taste or odour. When he first gave it, the dose was too small, but by increasing it to thirty grains good results were generally obtained. Sometimes much larger doses are necessary. The after-effects are generally unimportant. It has seemed once or twice to give rise to nausea the day after; but often the patient says the sleep has been very natural and refreshing. It is not so sure to produce sleep as paraldehyde. Hydrobromate of hyoscine has the advantage of being almost tasteless; and the dose is small. He began with a dose of $\frac{1}{120}$ of a grain, but he soon found this dose too small, and increased it to a sixtieth of a grain, using the following formula, giving twenty minims:

℞ Hyoscinæ hydrobromatis, gr. i,
Alcohol. ʒ iss,
Aquæ q. s. ut ft, ʒ xx.
Misce.

In a few instances he has given twenty-five minims of this mixture. There is so little taste to this that it can be given in some simple drink, as gruel or beef-tea, without the knowledge of the patient. In one patient it produced discomfort in the head the next day, so that after two trials it was given up and urethane given instead. In other cases the sixtieth of a grain, given for a week or more, has produced no bad effects. In a few cases it has failed to produce sleep, and the sleep secured in other cases has not been of so long duration as that usually produced by paraldehyde, but subsequently, in these same cases, the latter drug has not proved more efficacious. On the whole, DR. WEBBER'S experience with this drug is that it will act favorably with a large number of patients; that it is acceptable on account of its lack of taste and odour, and because of its small dose; that the sleep obtained is very refreshing and natural. It is, however, rather more likely to leave unpleasant effects, and seems to lose its power by repetition sooner than either urethane or paraldehyde. Hypnone he has given in capsules, in doses of five to eight drops, or even more; the former dose is rather small for good results. It will produce very natural sleep, and the patient awakes refreshed. It is of much less value than the drugs already considered, and fails more frequently than the others in producing sleep. It may be conveniently substituted for the others, when they have been taken some time consecutively.—*Practitioner.*

RECTAL INJECTIONS OF GAS.—The treatment of chronic pulmonary diseases is of daily interest to the practitioner, who welcomes eagerly new methods which hold out a hope of relief to troublesome symptoms, or of cure in a long standing and obstinate case. New remedies, like new servants, seem always to do well at first, but, with the one as with the other, it takes time before the good and bad qualities can be discovered. A few years ago we were using respirators and inhalers in the treatment of phthisis and chronic bronchial troubles, and the journals were filled with reports of wonderful results obtained by this method. Ask the nearest pharmacist and he will tell you that now the sales of respirators in a year are not equal to what they were in a week, and that practically the method has been abandoned. Meanwhile the fight goes bravely on, and as the enemy has not yielded to the attack *a fronte*, the tactics have changed, and we are asked to assault him *a tergo*.

It has long been known that an interchange takes place between the gases of the blood in the intestinal capillaries and those contained in the bowel. Some time ago BERNARD and COTNIL called the attention of the French Academy to the fact that gases injected into the bowel pass to the lung and are exhaled. Relying upon this physiological fact, BERGERON, of Lyons, and several other French therapeutists have advocated the treatment of chronic pulmonary diseases by the rectal injection of gases. Already the reports of the success in chronic bronchitis, asthma, and phthisis, are so favorable that the method is likely to come into very general use, and we may soon expect here to have a WOLFF'S bottle by the side of each phthisical patient, who will take his medicine thrice daily through a rubber

ube and a rectal canula. Indeed, the plan as been for some time in use at the Philadelhia Hospital.

At the Société de Thérapeutique there has ecently been a discussion on the subject, and rom the report in the Gazette Hebdomadaire, No. 51, 1885, we glean the following information: Dujardin Beaumetz stated that he had 25 patients under the treatment, and preferred he sulphuretted hydrogen to the carbonic cid, or to the sulphuretted or carbonated vaters. The carbonic acid alone always caused olic without any improvement, but the addiion of sulphuretted hydrogen caused a diminuion of the cough and of the expectoration, while the sleep returned and the appetite improved. These good effects were not always btained until after the treatment had been mployed for some time. He had also used ucalyptus and iodoform, but without benefit. n bronchial catarrh the improvement was in ome cases most marked and rapid. Paul ecommended a sulphur water charged under ressure with carbonic acid. In siphons this is eadily available, and the gas is allowed to nter the bowel until there is a feeling of tenion and heat, and a tendency to expel the anula. About one quart of gas is injected at ach sitting; as much as two quarts usually auses dilatation of the transverse colon and ainful tympany.

The general opinion seems favorable to a urther trial of the method. It was remarked hat the patients complained of not receiving ny medicine under this plan of treatment, nd they were not satisfied with the injections lone.

The Treatment of Rheumatic Fever.—Since the introduction of salicylic acid in 1875, his remedy and its compounds have been uniersally employed in rheumatism, and about ufficient time has now elapsed to permit us to rrive at a safe judgment of its uses. On lookng over the reports, we find that in some form r other it is still employed in every one of the ospitals represented, and we ask for no better uarantee of its merit than this one fact. As a ule, a decade plays sad havoc with a drug nnounced with the *éclat* which attended the ntroduction of salicylic acid, but the experince of many physicians the world over seems o have accorded it a safe place in the therapeutics of rheumatism. The early anticipations, owever, that we had in it a specific have not been realized, and too rapid cures have been xpected. The elaborate analysis by Palmer Howard in Pepper's System of medicine, vol. i., seems to indicate very surely that cases reated by this method do not get better any uicker than on the old alkaline plan; indeed, f statistics are worth anything, they show that he cases do not get well so soon. Cardiac omplications are probably more frequent, hough in the reports we have published Dr. Loomis alone suggests that the effects of the cid favor their occurrence. It is a very genral opinion, also, that under the salicylate reatment relapses are more frequent. Unquestionably the most striking action of the rug is in the relief of the pain and the reduction of the temperature, so that the extreme uffering and the general misery of the patient re promptly relieved. Upon these manifestations of the disease it often works "like a charm," and possibly relapses are in many cases brought on by careless exposure or errors in diet in patients whose acute symptoms have been rapidly removed while the *materies morbi*—whatever that may be—still remains in the system. A combination of the salicylates and alkalies has probably a more decided effect upon the disease than either remedy alone. Dr. Killicutt, as shown by the report from St. Luke's hospital, New York, continues to have good results from the use of oil of wintergreen, which seems to act almost as promptly as salicylic acid, of which it is a methyl ether.

That rheumatic fever is essential a self-limited disease, and is not materially influenced in its duration by drugs, is an opinion fully justified by a comparison of the reports of Sutton with those of the various writers who have published the results of the alkaline and salicylate plans of treatment. We have been to ready to mistake the relief of symptoms for the cure of the disease.

The reports do not refer very fully to the use of antipyrin in this disease, which is spoken of by recent German writers as a specific. It would seem, like the salicylates, to reduce the fever and to relieve the pain, and so far it may be specific, but we require further evidence to show that it really limits the course of the malady. Frankel, in Deutsche medicinische Wochesnschrift, Nos. 43 and 44, speaks very highly of its value in 34 cases, but acknowledges that in certain cases it cannot replace the salicylates.—*Med. News.*

How to Syringe the Ear.—In order to syringe the ear properly, a hard rubber syringe should be used, and a thin bowl be held close under the lobe of the ear, well up into the fossa at the articulation of the lower jaw with the temporal bone. The patient himself, if he be a large child, or an adult, will hold the bowl better than an assistant. The surgeon then straightens the meatus, by gently pulling the auricle in an upward direction with one hand, while with the other he uses the syringe. It is well to allow the water first to pass into the concha of the auricle, and not immediately into the canal, in order that the patient may judge as to the temperature of the water, which should be lukewarm.

The injection of water is a potent agent in removing a foreign body from the ear. It is sufficient to remove a plug of wax, which has been impacted for years, and which has completely plugged up the auditory canal. How much more potent must be the stream of water, when there is sufficient space through which it may get behind the foreign body and wash it forward by the returning current! There are no cases on record where syringing, when undertaken before any other attempts have been made, failed to remove a foreign body from the ear.

Unfortunately, however, those who believe in the efficacy of the simple procedure of syringing, do not always see these cases at first. The foreign bodies are often impacted, or so situated that a stream of water cannot pass behind them. There is often, also, very great inflammation of the parts, caused, not by the foreign body, but by the attempts to remove it.

If it be plain that the foreign body is not causing the severe symptoms, a little delay may be advised, until proper local treatment—the use of leeches, and the instillation of warm water—has subdued the inflammatory process. If it be probable that the foreign body is wedged in upon the drum, or perhaps pushed through it into the cavity of the tympanum, there is nothing to be done but to remove it at all hazards. Perhaps the best way, in case all attempts by means of delicate instruments introduced into the canal (which is at the same time well illuminated, by a concave mirror placed on the forehead by means of a band) have failed to reach the body, will be to adopt TROLTSCH'S suggestion, and to detach the auricle posteriorly, and thus reach the body from behind. Having thus separated the auricle from its attachment, the membrana tympani will be thoroughly exposed, when it will be very easy to remove anything which may be upon it.—DR. H. G. MORSE, *Maryland Medical Journal.*

ON THE USE OF PISCIDIA ERYTHRINA, CALLED IN BRAZIL MULONG, AS AN ANALGESIC REMEDY.—By A. M. DUJARDIN-BEAUMETZ, Sec'y.—DR. CLEMTNTI FERREIRA, of Rezende, Brazil, in a letter written to DUJARDIN-BEAUMETZ, in the Bulletine General de Therapeutique, Dec. 30, 1886, states:

For some time, and notably since the studies of DR. LANDOWSKY, piscidia erythrina has acquired a certain reputation in the therapy of pain phenomena, and in your excellent conference about new analgesic remedies you speak of this remedy at some length. In analyzing the studies made of this substance, I have arrived at the conclusion that they refer to the same plant which is called molungo in Brazil, and which for a long time has been employed here in medical practice in cases where we have recourse to sedative agents.

It is in the form of the extract that this substance is generally employed, and the clinical observations of numerous practitioners of Rio Janeiro and Rezende, among whom I take the liberty to cite myself, seem to establish the fact that the extract of molungo administered in therapeutic doses, has the property of inducing a peacable, refreshing sleep, resembling the physiological sleep more than that caused by opium, and one which could be called a veritable pathological sleep, according to the expression of my eminent friend, MR. HUCHARD. In many cases where I had to treat patients tormented by violent pains, such as those connected with the neuralgias, inflammatory tumors, whitlow, etc., I have derived great advantage from the employment of the extract of molungo, which I have prescribed in preference to opiates, which are less easily borne.

I have also utilized this remedy in the fatiguing coughs, and the chin cough (whooping cough) of tuberculous patients, and in spasmodic bronchitis. But the results, though appreciable, have not been so striking. It has done good service in cases of insomnia of neuropathic origin, and of anæmic patients, as well as in the delirium of certain infectious pyrexias which manifest themselves in subjects given to the excessive use of alcohol.

Therefore, the practice of the clinics in Brazil confirms on all sides the conclusions of the European savants, with reference to the analgesic and sedative action of piscidia erythrina, or molungo, and this should lead physicians to have more frequent recourse to this remedy, in view of the favorable results which we can secure in all cases where we may have occasion to soothe pain and bring about a refreshing, quiet sleep, without any after-effects.

RHUS AROMATICA.—Almost seven years ago the writer first called attention to this remedy through the American Medical Journal, and a little later the drug was introduced to physicians throughout the land. I also distributed samples of the crude drug to the most prominent physicians throughout the United States, and, to-day, independent of the hundreds of testimonials published, I could fill a large volume with flattering reports of the high esteem in which rhus aromatica is held by the medical profession everywhere; indeed, it is one of the new remedies that has come to stay. At this date new remedies are looked upon with a great deal of allowance, for so many new drugs and compounds are being introduced and placed on the market that physicians are losing much of their former faith in the so-called new remedies.

Rhus aromatica occupies a place in therapeutics heretofore unoccupied by any, and it is, therefore, not necessary to discard any old and well-tried remedy in order to test its merits. Its sphere of action on the economy is single, and alone positive and unmistakable when understood.

Rhus aromatica is the remedy *par excellence* for all fluxes of the mucous membranes, accompanied by relaxation. Hematuria, uterine hemorrhage and hemorrhage of the lungs, are promptly relieved by its action. It will relieve diabetes insipidus nine cases out of ten, if curable, and for incontinence of urine in children, not a result of habit, it is as near a specific as the word specific will admit, and in old persons who cannot retain their urine, it will relieve just as promptly. It is not necessary for me to give cases illustrating its action, but my desire in this brief article is simply to call attention to the rhus aromatica. Those not acquainted with the remedy can easily look it up, try it, and they will not be disappointed. I will cheerfully mail to any physician so desiring, a pamphlet which I have prepared, illustrative of its action as a therapeutical agent, and I am sure the little time given to this remedy will well repay physicians to investigate its merits. The different preparations of rhus aromatica are now made by all reliable pharmacists.—J. T. MCCLANAHAN, M. D., in *Pharmacist.*

BENZOATE OF SODIUM A SPECIFIC FOR DIPHTHERIA.—DR. A. BRONDEL writes, in the Bulletin Général de Thérapeutique of November 15, 1886, concerning the treatment of diphtheria by benzoate of sodium, and asserts that of two hundred consecutive cases he has not lost a single one. He admits the possibility of a mistaken diagnosis in some instances, but even excluding fifty per cent. on this account he still has one hundred cases without a death. His method is as follows, Every hour the patient takes a tablespoonful of a solution of benzoate

of sodium, fifteen grains to the ounce, and at the same time one-sixth grain of sulphate of calcium in syrup or granule. In addition to this, the throat is thoroughly sprayed every half hour with a ten per cent. solution of benzoate of sodium. This is done religiously at the regular intervals, day and night, but no other local treatment is employed; no attempt is made to dislodge the false membrane, and no pencilling or painting of the fauces is resorted to. Tonics are given and antipyretics are used when occasion calls for them. The nourishment consists of beef-juice, tender rare meat, milk, etc., but bread and all other articles which may cause irritation of the throat are forbidden. The sick-room is kept filled with steam from a vessel containing carbolic acid, turpentine, and oil of eucalyptus in water.

The employment of benzoate of sodium is not a new method in the treatment of diphtheria; for it has been tried, and is recommended highly by LETZERICH, KIEN, FERREOL, and others. But this, of course, speaks so much the more strongly in favor of the remedy; and as DR. BRONDEL'S results were better than those obtained by others using the same drug, it is to be presumed that his method of employing it is the best.—*Medical Record.*

HYDROFLUORIC ACID IN TUBERCULOSIS.—DR. SEILER has treated tuberculous patients by means of inhalations of hydrofluoric acid. The acid was inhaled once a day for the space of an hour. The process consists of passing the air that is to be breathed through the mixture of acid and water contained in a gutta-percha bottle by means of a pair of bellows. One hundred and fifty grammes of water and fifty of the acid are the proportions of materials contained in the bottle through which the air is forced. The air charged with the vapors of the acid is injected into the atmosphere of the chamber wherein the patients are sitting. The proportion of vapor is said to be ten litres per cubic metre of space. It is said that the shortness of breath has been relieved after from one to ten sittings; the paroxysms of coughing have been altered in character, so that they become less distressing and of much shorter duration; night sweats disappear after the sittings have extended to fifteen in number; the expectoration is modified; the appetite is gained when previously lost; the weight of the body is increased; the organic and functional derangements of the respiratory passages diminish slowly, it is true, but the amelioration is nevertheless indubitable.—*London Lancet*, Nov. 27, 1886.

FLUID EXTRACT OF CORN SILK IN THE TREATMENT OF CYSTITIS.—This preparation was introduced to the profession by Messrs. Parke, Davis & Co., some few years since, indorsed at the time as a valuable agent in the treatment of cystitis. Since its introduction we have ourselves used it, with what we thought decided benefit, and we are glad to note that it has also been successful in the hands of others. DR. RUSH M. BROWN, writing in the MEDICAL AGE, says that it occurred to him that, as it had astringent properties, it would act more speedily if brought in direct contact with the mucous surface. He therefore adopted a mixed plan: applied it topically and administered it internally. After washing the bladder with hot water, he adds one drachm of the fluid extract to four ounces of water, and injects this into the bladder, allowing it to remain as long as it can be retained. He repeats this twice a week, giving internally, at the same time, 20 drops of the remedy three times a day. DR. BROWN says that while the time as to recovery varies, he has found that this remedy has made a permanent cure of every case of acute cystitis which has come under his observation, and he reports quite a number of them.—*Miss. Valley Med. Monthly*, Dec., 1886.

EXTERNAL APPLICATION OF THE JUICE OF EUPHORBIA.—Since hypodermic injections of papain have been used in diphtheria and cancer, without accident of any kind resulting, the juice of euphorbia has been tried. The results were not very satisfactory. M. BAUDRY published, in the Bulletin Medical du Nord, the case of a patient suffering from cancroid of the right lower lid, who had himself applied a kind of poultice, made of crushed twigs and leaves of the euphorbia (E. helioscopia), a plant containing a milky corrosive juice, employed by country people as a preventive of warts. Two hours afterwards the pain became so intense as to oblige the patient to remove the poultice; he was also attacked by acute conjunctivitis. When first seen eight days afterwards, a whitish ulceration occupied the lower third of the cornea, which threatened to spread rapidly; this was followed by iritis, and hypopyon ensued. SÆMISCH'S operation was done the next day, and the patient recovered, with a large adhering leucoma, for which iridectomy will be performed later on. M. BAUDRY mentions the communication made by M. LANDOWSKI, at Grenoble, in 1885, on the destructive action of the juice of euphorbia.

SEVERE GASTRIC DISTURBANCE DURING PREGNANCY; CURE BY LOCAL APPLICATION OF COCAINE.—DR. BOIS, of Aurillac, reports a case of intractable vomiting in a pregnant woman, which, in spite of all medication, for several months threatened the patient's life, and in which the induction of labor was about to be resorted to by the attending physician. A cure was promptly affected by the application of cocaine to the vaginal surface of the cervix.

The application was made in the following manner: A mass of cocaine salve (cocaine muriat. 1.0, vaselin 50.0) was applied on gauze, morning and evening, to the cervix. The trouble abated in a short time, and in the course of three weeks a complete cure occurred. There was no relapse thereafter, though the medicine was withheld. Cocaine internally had been previously tried by the patient without success.—*Amer. Pract. & News.*

COCAINE NOT A DANGEROUS TOXIC AGENT.—DR. W. A. HAMMOND reported the results of some experiments with cocaine hydrochlorate to the New York Neurological Society, in the

course of some remarks upon cocaine and the so-called cocaine-habit. He believed that the injurious effects of coca had been greatly exaggerated; having injected cocaine hypodermically, commencing with one grain, and day by day increasing it until he administered to himself eighteen grains without serious symptoms of poisoning beyond intense exhilaration and subsequent headache. In each of his experiments the diuretic influence was evident. Cases to which he had given the remedy for some time were able to discontinue it abruptly without ill effect; he therefore denied that a cocaine-habit exists which is at all comparable with the opium- or alcohol-habit.—*The Medical Record*, Nov. 20.

ACCOUCHEMENT DURING HYPNOTIC SLEEP.—In the Wiener Med. Wochenschrift a case is mentioned of a woman whom DR. BRAUN succeeded in rendering unconscious during labour, by throwing her into a condition of hypnotic sleep; the uterine contractions were particularly painful. They were equally violent during the period of unconsciousness, but the intervals were somewhat longer; dilatation of the passages took place in the most satisfactory manner, and delivery was speedily accomplished. The placenta was expelled into the vagina, and was easily withdrawn with the hand. On awakening, the patient did not complain of pain, and afterwards slept naturally for several hours. One of the most interesting features of the case was that the uterine contractions induced contraction of the abdominal muscles without awakening the patient. Hæmorrhage was very slight.

NEW METHOD OF EMPLOYING ELECTRICITY IN NEURALGIA.—DR. ADAMKIEWICZ describes in the Polish journal Przelad lekarski an exceedingly effective way of applying electricity for the relief of neuralgia of various kinds. The apparatus he uses is a constant current battery, the cathode being a concave metal plate lined with electrical carbon, which is saturated with chlorosorm. This is then applied over the painful spot, and a current, weak at first but gradually increasing in strength, passed. One or two application of this kind were found, says the author, sufficient entirely to relieve the severest cases.

AN ANODYNE FOR DENTAL CARIES.—DR. K. GSELL-FELS ("Corresp.-Bl. f. schweiz. Aerzte;" "St. Petersb. med. Woch.") recommends the following mixture:

Rasped camphor	5 parts;
Chloral hydrate	5 "
Cocaine hydrochloride	1 part.

On heating the mixture to the boiling point of water, an oily liquid is formed. This is to be applied lightly, and it is said that after a few applications the pain will surely be alleviated. —*N. Y. Med. Jour.*

CONIINE BY SYNTHESIS.—LADENBURG succeeded recently in preparing the genuine coniine artificially by heating paraldehyde with a-picoline and treating the allyl pyridine thus obtained with sodium. This is the first synthesis of a natural alkaloid. Several weeks ago an Englisman claimed to have found how to prepare quinine artificially, but the rumor wants thus far confirmation. He keeps his method secret. LADENBURG has shown the identity of cadaverine (an alkaloid formed in decaying matter) with pentamethylen-diamine, $C_5H_{14}N_2$.—*Western Druggist*, Dec., 1886.

GALAZIMA is the name of a new milk-preparation of the nature of kumyss and kephir. It is prepared by mixing four grains of good grain-yeast in a little water, and adding this and ten grams of cane-sugar to a litre of milk, hermetically sealing the bottle, and then shaking the mixture. At the end of twenty-four hours the galazima is ready. It is described as a pleasant and nutritious beverage, containing one per cent. of alcohol, and heavily charged with carbonic acid gas.

MUSCULAR RHEUMATISM DUE TO THE USE OF TOBACCO.—I have met a great many cases of muscular rheumatism (says DR. EDWARD ANDERSON in the Maryland Medical Journal) due to the use of tobacco in some form, mostly in the shape of snuff placed under the tongue. All remedies were unavailing whilst the use of the weed was indulged in. Every practitioner, I think, on meeting with a case of the above disorder should inquire as to the tobacco habit, and correct it, if possible.

PISCIDIA ERYTHRINA AS A UTERINE SEDATIVE.—DR. LESSONA (Gazz. delle cliniche; Ctrlbl. f. Gynäk.) reports a hundred and six cases in which tincture of piscidia erythrina was given, to the amount of from 75 to 225 minims within an hour or an hour and a half, on account of after-pains or threatened abortion. Favorable effects were produced in seventy-one per cent. of the cases.—*N. Y. Med. Jour.*, Dec. 11, 1886.

THE GALVANIC CAUTERY IN DIPHTHERIA.—BLOEBAUM (Dtsch. Med.-Ztg.; Ctrlbl. f. d. gest Therap.) applies cocaine to the affected parts, and then cauterizes them with the galvanic loop to kill the micro-organisms. Thus far he has tried the method only on the lower animals, of which he has thus far cured sixteen out of twenty that had been inoculated artificially.

TO REMOVE STAINS OF IODINE FROM THE SKIN.—The sulphide of sodium, or sodium sulphydrate, in a ten- or twenty-per-cent. watery solution, applied upon a compress, will remove the stain of iodine, as well as allay its irritant action when excessive.—*Phil. Med. Times*, Dec. 11, 1886.

The experiment has been tried, in the way of aerial cures for consumptives, to introduce the system of sleeping in the open forests. The result has been thus far a marked success; the condition of the patients undoubtedly improved under the continual influence of the open, pure and aromatic air of the pine forests.

The Medical Age.

Vol. V. DETROIT, FEB. 25, 1887. No. 4.

Original Articles.

CLINICAL LECTURE.*

BY H. O. WALKER, M. D.†

RESECTION OF THE ELBOW-JOINT.

Gentlemen:—This boy, RUDOLPH F., aged 11 years, you will remember, is the one that I operated upon two weeks ago, when I removed the lower end of the humerus and the upper ends of the radius and ulna of the left elbow. The object of the operation was to relieve an ankylosis of the joint caused by a severe injury, the result of a fall from a tree. The position of the arm at the time of the operation was extreme extension, without any motion whatever, nor did I succeed in effecting any even after profound anesthetization and thorough manipulation. Originally there had been a fracture of the coronoid process and dislocation of the ulna, backward, which had never been reduced.

The operation consisted in making a central longitudinal incision, about four inches in length, a little to the inner side of the median line of the long head of the triceps and ulna, cutting down to the bone and making careful dissection, saving as much of the peritoneum as possible, at the same time saving all muscular attachments and ligaments, and when the ends of the bones were thoroughly relieved, they were removed by means of a chain-saw, taking care to remove sufficient so as to have great freedom of movement in the way of flexion and extension, as by this operation we expect to make a fair, serviceable fibrous joint. I bring him before you to-day as an illustration of the modern treatment of wounds. This dressing that I am about to remove has not been touched since the morning following the operation, when I removed the drainage tube, now two weeks since. You notice that the wound has healed its entire length without the formation of one drop of pus.

Case 2 is another illustration of antiseptic surgery. This girl, aged 20, entered the hospital September 22, 1886, with strong evidences of inflammation of the right knee-joint. She was put to bed and a plaster cast applied, and extension made. This was kept up until Oct. 30th, without benefit; in fact, the knee grew worse. The joint was enormously distended with fluid, which I partially removed by the aspirator; the fluid was semi-purulent. Nov. 6, when I presented her to you, the fluid had re-accumulated, and the leg was flexed and very painful on any attempt at motion. I then opened the joint freely at its external side, and washed it out thoroughly with a corrosive sublimate solution of one to a thousand, put in a drainage-tube, and dressed the wound with antiseptic bandages. The next morning I removed the tube and applied the dressing which you see here to-day, and on removal, you notice that the wound is healed, the swelling gone, temperature normal, leg straight, and no pain on motion.

I will spend the rest of the hour in describing to you, briefly, what is understood by

ANTISEPTIC SURGERY.

LISTER, some twenty years ago, first began combatting the activity of germs in wounds, being led to do so by the results of PASTEUR'S experiments, and although, as has been said, Listerism is dead, yet its soul still goes marching on.

Wounds are either aseptic or septic. A purely aseptic wound is a subcutaneous one, impervious to air with its poisonous compounds, such as we meet with in a simple fracture, and, when properly adjusted, goes on, as a rule, to recovery without suppuration.

A septic wound is admirably illustrated in a compound fracture, open to all poisonous contagion, the disastrous results of which have been observed by us all.

It must be plain, then, that if we secure and maintain the same conditions in a compound fracture that exist in a simple fracture we should get similar results.

How are we to get these results in open wounds? Answer: by making and keeping them thoroughly aseptic. All open wounds become septic either through the medium by which they are made, particles of dust in the air, more or less loaded with micro-organisms, and the dressings which are afterwards applied. Aside from these septic influences, there are other conditions, such as age, idiosyncrasy, general and local conditions, etc., which we have not time to dwell upon, that interfere with the healing of wounds, yet, all things

* Given at Harper Hospital, November 20th, 1886.

† Professor of Orthopedic Surgery, Diseases of the Genito-Urinary System and Clinical Surgery in the Detroit College of Medicine.

being equal, there is no reason why open wounds should not heal without suppuration.

This assertion I will now, I think, be able to prove to your satisfaction, as it has been definitely settled by PASTEUR, TYNDALL, and others, that fermentation will not take place in organic matter except through the introduction of living organisms that find in it proper soil for existence and multiplication. Such being the fact, it stands to reason that open wounds suppurate only when exposed to living organisms in the air, namely, micro-organisms.

Micro-organisms are found in the air in the form of minute spores or germs, and when transplanted to suitable soil become fully developed organisms. TYNDALL says that these germs "abound in every pool, stream and river; all parts of the moist earth are crowded with them. Every surface which has been dried by the sun or air contains upon it the particles which the unevaporated liquid held suspension. From such surfaces they are detached and wafted away, their universal presence in the atmosphere being thus accounted for. They are endowed with a power of flotation commensurate with their extreme smallness and the specific lightness of the matter of which they are composed."

The micro-organisms that produce inflammation and suppuration in wounds, are micrococci, the spherical organisms and rod-like organisms which comprise bacteria and bacilli, the former somewhat oval in shape and the latter resembling slender rods. All these forms may flourish in a suppurating wound.

The rod-like organisms are the most numerous in deep-seated and bad-smelling acute abscesses, while the micrococci are the most abundant in the superficial and least smelling discharges, showing they are separate and distinct organisms, requiring for their subsistence a different food.

If this is true, and there is no reason to doubt it, as it has been verified frequently by such observers as PASTEUR, KOCH, and OGSTON, we have to contend much more frequently with micrococci (which are more difficult to combat) than bacteria.

Taking for granted that these organisms, and their secondary products, namely, ptomaines, are the cause of suppuration, inflammation, septicæmia and interference with wound union, the next question is how we can best prevent the entrance of these germs, destroy them and arrest their development.

This brings us to the subject of wound treatment, namely, *asepsis* and *antisepsis*. As has already been stated, all wounds made subcutaneously are aseptic, while it is quite possible for the surgeon in inflicting wounds to prevent their contamination and keep them aseptic. But this requires, on his part, the greatest care, and involves absolute purity of air, cleanliness of instruments, dressings, and himself, until the wound is finally healed. When wounds become aseptic, it is necessary to resort to measures that will remove all substances that serve as food for these germs, and lastly, to use such substances as will destroy them and prevent their growth, namely, antiseptics.

In the choice of an antiseptic we take into consideration:

"1st. Its power as a germicide or germ-restrainer.

"2d. Its immediate local effect on wound surfaces—neutral, irritant, or caustic.

"3d. Its remote constitutional effect when absorbed into the general circulation."—(PILCHER: Treatment of Wounds, p. 76.)

The most general in use are carbolic acid, mercuric bichloride, and iodoform, 95 per cent. of which is iodine, although we are not restricted to these, for there is more or less efficiency in permanganate of potassa, salicylic acid, boracic acid, chloride of zinc, naphthalin, and subnitrate of bismuth.

Experiments of STERNBERG show mercuric bichloride to act as a germicide in the proportion of 1 part to 2,000, and as a germ-restrainer in 1 to 35,000. Carbolic acid, 1 to 100, and 1 to 500. Iodine, 1 to 500, and 1 to 4,000.

Mercuric bichloride, carbolic acid and iodoform fulfill probably the best the three indications just mentioned. Mercuric bichloride solution varying in strength from 1 to 500 to 1 to 5,000, is inodorous, non-irritating, and keeps the wound sweet.

The 1 to 500 solution is appropriate for washing out in instances such as we find in compound fracture, while a solution of 1 to 1,000 would be a standard for irrigation of operative wounds, sponges, towels, dressings, and sutures; while carbolic acid is more appropriate for the disinfection of instruments, in the proportion of 1 to 20, as the mercuric bichloride produces corrosion of metals.

In the proportion of 1 to 40 it should be employed to purify the hands of operator and all assistants. Iodoform does best when dusted over the coapted edges of the wound, and in the gauze bandages, in which it should be thoroughly incorporated.

Having once determined upon an operation, we should consider:

1. The selection of a room for the operation.
2. The preparation of instruments, solutions, sponges, towels, ligatures, sutures, drainage-tubes, and dressings.
3. The preparation of the patient for operation.
4. The preparation of operator and assistants.
5. Details of operation.
6. Application of protective dressing.

7. Constant antisepsis until the wound is healed.

In selecting a room for operation, take one on the upper floor, for the higher you go up, the purer the air.

All operating rooms in hospitals should be in the top story. Although the carbolic spray does not kill germs in the air, yet it has the effect of a local rain-storm by mechanically precipitating floating matter in the air.

A strictly aseptic room is one so constructed that it can be thoroughly washed with corrosive sublimate solution of 1 to 1,000, just before an operation, and after, for it is in this sort of a room that the best results have been attained.

Instruments should be scrupulously cleaned, and kept for some time before an operation in a solution of carbolic acid, 1 to 20, and sponges and towels should be kept, while not in use, in the corrosive sublimate solution.

Sponges that are to be used on wound surfaces should be soft and of a fine texture, with elasticity enough to allow of expansion after water has been squeezed from them. Thorough purification is essential, as it may make the difference between success and failure. The sponges, though of a fine quality, sold for surgical purposes, require a certain process before they are fit to use. They should undergo, first, thorough beating to remove sand, shells and other foreign substances, and undergo frequent and prolonged washings in warm water, not boiling, for hot water spoils them. When this is done, place them in sol. permang. potass, 1 to 500 for 24 hours, then rinse thoroughly and put in a 1-per-cent. solution of hyposulphite soda and add one-fifth the amount of 8-per-cent. solution of strong hydrochloric acid, remaining but a few minutes—just long enough to make them white. They are then washed until scentless, for two or three days, requiring frequent changes of water, and lastly put away for two weeks in a solution of corrosive sublimate, 1 to 1,000, before using. If used again they should again go through the purification act by washing them in a sol. carb. sodæ, ʒ i to 1 quart, and put away in corrosive sublimate solution.

Ligatures should be either of silk or cat-gut, of at least three sizes, and prepared by putting them in a sol. cor. sublim., 1 to 100 for 2 or 3 hours and placed in the standard solution of corrosive sublimate.

Drainage tubes should only be used where it is impossible to maintain accurate apposition of the two surfaces. A drainage tube is a foreign body, therefore should be removed as soon as the period of profuse secretion has passed. All media of drainage should be as thoroughly prepared as are sponges and ligatures, and kept in the antiseptic solution.

In preparing a patient for an operation we will presume that everything has been done as far as possible to prevent shock, and he or she has had a bath and been put upon the operating table in clean antiseptic clothing, when all parts that are to be included with the wound under the protective dressings must be thoroughly disinfected. Skin to be shaven and thoroughly scrubbed with soap and water, even ether or turpentine, and finally washed with the antiseptic solution corrosive sublimate, 1 to 1000. Aside from this all clothing, oil cloth, and every possible point, except the site of the operation, that sponges, instruments, or the hands of operator or assistants are liable to come in contact with, must be covered with towels that have been wrung out of this same solution.

It is just as essential that the hands of the operator and his assistants receive the same purification as the patient's skin. Especially the nails and folds of skin about them; even to the hair and beard, covering it with a light havelock or cowl, which can be attached to the gown that he and his assistants should wear, that can be kept for use in a chest liberally supplied with carbolic acid fumes. This same precaution should be exacted of every looker-on who is in close proximity to the operating table, for I firmly believe that there have been failures and deaths following operations due to the officious introduction of a dirty finger into a wound by a bystander.

An operation is quickly done when it is well done. The mechanism of an operation is secondary to its technique. All blood-vessels severed, however small, should be immediately seized by an assistant with a catch forceps and turned aside until a number have been used when the vessels can be tied at leisure with cat-gut, and the operation continued until completed. At the same time the assistant will keep the wound free of oozing blood by repeated sponging, so that at the finish the wound will be perfectly free from blood and ready to close up with sutures. All sponges while using should be frequently washed in a warm antiseptic solution and thoroughly squeezed out. All instruments when dropped should be quickly seized, wiped, rinsed, and dropped into the solution, ready for use at the call of the operator. When all oozing has stopped the edges of the wound are accurately coupled with silk sutures, and before the last suture is tied the cavity of the wound and surrounding parts are once more thoroughly irrigated and squeezed out and iodoform sprinkled along the line of coaptation, when the whole is covered with the antiseptic dressing, which consists first of the application of sublimated or iodoform absorbent gauze of several thicknesses, and then covered with a heavy thickness of sublimated absorbent cotton firmly held in place with sublimated gauze bandages, and over this again

cotton bandages (treated previously in the sublimate solution) firmly applied, to prevent the ingress of air underneath.

This dressing is the one used in closed wounds, but when a thorough coaptation of wound edges is impossible and a drainage tube is necessary (and, by the way, if a drainage tube is used it should be of large calibre, ‡ inch drain, and often two are better than one, for may become clogged up) sublimated peat, wood wool, should take the place of absorbent cotton. The province of the antiseptic dressing is to render innocuous all septic germs that come in contact with it.

In open wounds the iodoform absorbent gauze is the best, for it possesses less irritating properties than the other antiseptics.

These dressings when properly applied do not need changing under eight or ten days. Occasionally dressings need changing sooner, owing to hemorrhage or serious oozing. In compound fractures it is often possible to allow the dressing to remain there weeks before changing. Wounds treated in accordance with the foregoing method have produced results such as must satisfy any reasonable mind of its great superiority over any former method.

THE ETIOLOGY AND CURE OF ASTHMA.*

BY EDWIN J. KUH, M. D.†

The work of WILHELM HACK, on the radical treatment of migraine, asthma, hay-fever, and other neuroses, has received very inadequate recognition in this country. By writers on hay fever he is frequently quoted in an off-hand manner together with a string of other authors; so that one derives the impression that few of those who quote him have read him. And if his specialistic colleagues do not do him justice, the large class of general practitioners ignore him altogether. His work is—taken altogether—of even greater interest to the physician than to the specialist, and it is a deplorable consequence of specialistic exclusiveness, that the results of his work have not yet received wider recognition among us. He teaches us that the rhinoscope must forthwith be as indispensable an instrument for all physicians as the thermometer and stethoscope.

The value of HACK'S discovery, that asthma nervosum is a reflex disease with, usually, the nose as a starting-point, can best be appreciated by one who himself, for many years, struggled against the disease and fumed at the utter impotence of medical art to stave off the attacks. If I, therefore, in the course of this paper, class myself among my own patients, I shall do so with the view of bringing the subject within closer range. It is foreign to my subject to consider the isolated publications, from VOLTOLINI downward, on the dependence of asthma upon polypous growths in the nose. Such cases are infrequent enough to be almost considered curiosities (MICHEL, for instance, reports 135 cases of polypus without asthma); and as HACK shows, polypi have rather a tendency to prevent asthma than to cause it. It will also simplify our subject, if we omit hay-fever from our consideration.

The form of asthma of which I wish to treat exclusively is that perenneal form which is more or less independent of the seasons, namely: Asthma nervosum, or "Essentielles Asthma" of the Germans. Some persons never get beyond a slight hint of asthma. They will from time to time make a heaving, sighing motion, or complain of præcordial fulness with or without palpitation, or of sudden drowsiness, or dream heavily at night and complain of dulness, lassitude and headache in the morning. This latter condition has many gradations, the culmination of which is nightmare. In the future we must, therefore, learn to distinguish between an incubus of gastric and of respiratory origin. Other half-asthmatics complain only of a fleeting, leaden heaviness in the limbs amounting almost to pain; the same sensation of which so many true asthmatics complain after an asthmatic night. The typical asthma nervosum is known to us all as a neurosis occurring in paroxysm.

The patient may or may not feel an aura. He will generally, towards evening, or when he lies down, or awakes in the night, begin to wheeze. This wheezing may be associated with itching in the nose, or sneezing, or coughing; the attacks last an indefinite time, and generally end with the expectoration of a transparent glassy mucus. Such patients are often free from asthma during the day. Physical and chemical irritants, such as dust, sudden changes in temperature, the inhalation of certain gases, and a long series of idiosyncrasies, which we find enumerated in text-books, can induce an attack. But the recumbent position is the most uniform exciting cause of the single paroxysms. Such patients may be free from chronic bronchitis, chronic emphysema, heart, kidney, intestinal, and uterine disease: hence the term "Essentielles Asthma."

When we read authors whose contributions to the study of asthma antedate the last few years, we are struck by the uniformity with which they cling to pet theories, each of which seems to give satisfaction to its upholder. It is merely an evasion to say that asthmatic paroxysms are induced by bronchial spasms, or by hyperæmia of the bronchial lining, or by the presence of Leyden's crystals, or by phrenic spasm, or by bulbar irritation, or by exudative bronchiolitis. For any one of these presumable

* Read before the Chicago Medical Society, January 3 1887.

† Surgeon to the Michael Reese Hospital, Chicago.

causes would demand a first cause, in order to merit etiological dignity.

A true etiology of asthma had therefore to be discovered, and HACK did it in the following manner: He knew, of course, of the occasional rôle of nasal neoplasms. SCHAFFER and B. FRANKEL had also indicated that the sensibility of the nasal lining could be so heightened through chronic catarrhal conditions, as to be a starting-point for reflex disturbances. Then HACK found that he could experimentally produce glottis-spasm by touching the turbinated bodies of a sensitive individual with a probe. He then reasoned as follows: A nasal mucous membrane which shows merely slight affection, and which is not deadened in its sensibility by thickening and hypertrophy, is perhaps a better surface for exciting reflexes than one which shows evident signs of disease. And if this were the case, he reasoned, then perhaps the importance of nasal reflexes had been formerly overlooked just because of the significant abnormities of such a sensitive nose.

The very frequency of certain conditions may has given rise to an under-estimation of their significance. And so HACK systematically examined the nose of every patient who. for whatever ailing, came within his reach. He learned to make one distinction very rapidly, namely: that which is usually termed hypertrophic nasal catarrh is a twofold condition, which in its effects is quite opposite. In the anatomically true rhinitis hypertrophica the mucous membrane is really thickened, hypertrophied through chronic inflammation. Pressure with a probe meets with a certain unyielding resistance, and there is a purulent, crusty secretion. This form does *not* give rise to reflex disturbances.

But there is another form, a pseudo-hypertrophy, the importance of which it is HACK'S merit to have pointed out. It is that transitory swelling of the cavernous tissue of the inferior and middle turbinated bodies, which has of late been so often described that I spare you a repetition. In this form the nose may either have a very dry, itchy sensation, or show copious watery secretion. Compression with a probe gives the air-pillow reaction. Such individuals show fleeting alternate or synchronous obstruction of the nasal cavities. Often, when examining the nose of patients, we notice sudden engorgements and collapse, so that HACK'S term erectility, is not an exaggeration. These cavernous bodies with their frequently anæmic covering form a link in certain morbid reflexes, and when this link is destroyed, through operative intervention, the reflexes cease. No symptom is more frequently overlooked by patients than transitory nasal obstruction. Most patients will positively deny its existence, until it is demonstrated to them. Therefore the assurance of an asthmatic that his nose has always appeared healthy is of no value.

Other asthmatics, if conscious of nasal trouble, consider it simply concomitant with their asthma, and it is characteristic of them that they will often resist the inquiries of the physician who attaches so much importance to rhinoscopic examination and nasal symptoms, when all their trouble seems located in the chest. It is interesting to observe how such people become gradually convinced, and how uniformly they marvel at having forgotten or overlooked most constant symptoms. Only recently I succeeded in showing an asthmatic half a dozen rapid openings and closings within barely more than a minute or two.

The theory of HACK is a simple one, and, although it does not cover all the ground, is a very satisfactory one. He says that the turbinated bodies become engorged through various irritants, and that this vaso-dilatory disturbance is transmitted to the bronchial tubes in asthma. The turbinated bodies act as accumulators for reflexes, store them up, as it were, and then transmit them to other parts. A destruction of the nasal swelling removes the reflexes. The experiences of numerous writers since 1883 corroborate the correctness of HACK'S discovery.

By way of illustration, I could not, I believe, select a better type of asthma of long standing than that of my own person. Twenty years ago, when I was eight years of age, I became subject to so-called colds in the head and on the chest. They increased in severity and frequency from year to year, so that my surroundings were often puzzled to find an explanation for each outbreak. Presently nightly dyspnœa began to set in, in the following manner: During the day my respiration was quite free, but as soon as my head touched the pillow, the first wheeze set in; the paroxysms were very severe. They ceased, after lasting throughout the night, in the morning, with the usual expectoration of glassy mucus.

During the day there was never any difficulty, except when occasioned by laughter. Laughter would infallibly cause itching under the chin and between the scapulæ; then I would cough convulsively, and the attack was upon me. But the recumbent position was the surest exciting cause. During the first years I also suffered from that form of conjunctivitis which is now known to arise from nasal disorder.

I must give DR. ABRAM JACOBI, of New York, under whose treatment I was at the time, credit for having already then, even without the use of the nasal speculum, laid stress upon a nasal trouble. But the aggravation of my troubles which followed upon the introduction of weak nitrate of silver solution into my nose, made the memory of him a less pleasant one in

those years than it is at present. The greater part of 1870 to 1875 I spent in the Swiss mountains, where I was entirely well. The attacks ceased from the day on which I reached the mountains, and infallibly returned on the very day I left them. Once during harvest season in Bavaria (1872), while I sat in a meadow, I was suddenly overtaken with convulsive sneezing, coughing and asthma. It lasted hours before I could reach the neighboring village. During that same period I developed a peculiar idiosyncrasy towards dinner. In the midst of the meal I would invariably for weeks be seized with a convulsive cough, so severe that it threw me to the ground. Asthma was never absent in these attacks. Then, at other times, one, or two, or three sneezes would initiate an asthmatic attack; or sometimes, especially after traveling, I would sneeze sixty or seventy times without intermission. In those days I had the sensation as if the asthma were brought on by a swelling, which seemed to begin above and behind the palate (it was associated with intense itching, which I attempted to relieve by rubbing my tongue against the hard palate), and traveled downward to the posterior pharyx, then seemed to skip the larynx, and continued from the trachea downward. This phenomenon lasted a few seconds, and then the attack began. Railroad travel would invariably cause a night of asthma. One hotel, at which I was frequently obliged to stop in Germany, adjoined a stable, and was regularly the cause of some of the severest attacks.

The few years which antedated my acquaintance with HACK'S writings were comparatively easy ones, because the inhalation of Kidder's asthma pastilles—the only palliative I ever used successfully—gave me very great relief. They not only immediately terminated an attack, but also prevented their occurrence for the next hours.

As soon as I became acquainted with HACK'S articles in the Berliner klin. Wochenschrift, of 1882, and with his monograph in 1883, I commenced stricter self-observations, and found the following:

As soon as I lay down my nose would become obstructed. The occlusion corresponded to the side on which I lay. By turning over, the occluded side would open and the other close. To have any part of the nasal mucous membrane touched by a probe gave such intense pain that I could not suppress an outcry. I could bring on an attack of asthma by rubbing my ala nasi against the septum.

Never did I feel the slightest dyspnœa when nasal respiration was free, and never was nasal respiration obstructed but what I felt asthmatic distress.

Under these circumstances there could be no hesitation; DR. JEFFERSON BETTMAN (now of New York) and DR. HENRY GRADLE, performed the galvano-caustic "destruction" of both inferior turbinated swellings. When I say galvano-caustic "destruction," I should like to put the word destruction in quotation marks: for I have found the radical obliteration of the entire inferior turbinated bodies almost an impossibility. HACK demands, and my experience confirms the correctness of his view, that the radical cure of asthma demands the radical destruction of the cavernous erection. But a longer and closer observation of such patients in whom the extirpation seems complete will almost invariably show relapses, which must again be subjected to operative interference.

In my own case fourteen cauterizations, performed with both a flat and furrow electrode in the manner described by HACK, have not succeeded in permanently clearing the nose. The asthmatic attacks have, to my unspeakable relief, ceased. Sleep is now a function of which I have lost all dread. But during the daily occurring fleeting occlusions, there is a feeling of heaviness on the chest and of excessive fatigue in the limbs which do not pass away until the nose is free.

What is it that causes nasal occlusion? I have observed myself so closely in this regard, and have so many corroborative observations of intelligent patients, that I can make these positive statements:

Firstly, the fullness of the turbinated bodies is regularly influenced by gravitation, and corresponds to the position of the head.

It is furthermore influenced by the temperature, and probably much more so by artificial warmth than cold; an over-heated room will almost invariably cause swelling in such patients. But the most dangerous and permanent cause of nasal obstruction is the inhalation of dust.

The time is, I hope, not far distant when our views on the etiology of respiratory diseases will undergo a radical change. The superstition of catching cold has lived too long. The light which mycological research has thrown on the etiology of most infectious diseases must soon influence us toward a conviction that respiratory diseases are *inhaled*, not caught, and that suppuration in the respiratory tract is as impossible without the presence of microorganisms, as it is on a wound. The superstition of "catching cold" is so pernicious because it diverts attention from the entrance-way of disease-generators. It is as impossible to contract an acute bronchitis through temperature influences alone, as it is to contract tuberculosis through a cold.

It is, therefore, of the utmost importance to warn asthmatics that as perfect an avoidance of dust inhalation as is possible in our contaminated surroundings, is necessary to prevent a recurrence of their trouble. Not only the dust in the streets, but also that in our houses, is to be avoided as much as possible. Carpets and

curtains are great receptacles of dust; and a strict regulation of street sprinkling will in the course of years, when the true etiology of respiratory diseases will have been recognized, be considered as important a municipal regulation as the regulation of sewerage.

When are we to operate on asthmatics? The more recent the asthmatic trouble and the more pronounced the nasal symptoms, the better the prognosis. When complicated with chronic bronchitis and chronic emphysema, the outlook is generally bad. A most thorough examination of heart, lungs, kidneys and intestines should precede any operative interference. In cases of cardiac and nephritic asthma with nasal complications, I have *never* cauterized. Firstly, because it has seemed to me irrational; and secondly, because I feel so much gratitude towards HACK'S discovery, that I shun any risk which might discredit it.

In some cases it is very difficult to decide whether an operation should be performed or not. For instance, in cases of long standing, say fifteen or twenty years, in which in the first years the nasal symptoms were very pronounced, but in later years have almost or entirely disappeared, in such cases cauterization is sometimes successful, but generally it is unsuccessful.

Cases in which the asthma is more or less constant and has lost its paroxysmal nature, give a doubtful prognosis. It has been a matter of experience with me, that those patients to whom the inhalation of Kidder's pastilles, or the application of cocaine to the nose (4-percent. solution on cotton), gives relief, afford a much better prognosis than others.

In asthmatics in which coughing precedes the attack and on whom all nasal symptoms are missing, nasal cauterization will cure, if the cough is a so-called nasal cough.

There are a number of asthmatics, fortunately a minority, who seemingly offer a good prognosis, but with whom, for unknown reasons, the operation will fail. There can now be no doubt that there are other starting points for reflexes in the respiratory tract, besides the nose. The works of TRAUTMANN and TORNWALDT have already added the vault of the pharynx to this list.

The bronchial tubes themselves can act as a starting point, as I can demonstrate on myself when I walk against a piercing wind, or inhale vapors of sulphurous acid with my nose plugged. So that, as HACK himself warningly says, we must not over-estimate the applicability of his discovery.

We must accuse the nose *per exclusionem*. Examine every patient thoroughly in every direction, and examine the nose *last*, is what I should like to advise.

About the operation itself little is to be said. It is, as far as we know, absolutely harmless. I have performed many hundred cauterizations without any noteworthy complications. I have never had any traumatic infections. I insufflate iodoform or iodol upon the wound, introduce a pledget of cotton for a few days, and keep my instruments aseptic.

The results are, on the whole, extremely gratifying. Asthma of many years' standing is sometimes broken after the very first cauterization. Almost all patients are relieved and many cured in the strict sense of the word. Some have relapses, which additional cauterization will remove. Others again may relapse with a new reflex sensitiveness in other parts.

But on the whole the subject, still so new, still so capable of growth, broadening and development, is one of the most pleasing contributions to medical knowledge, and the name of HACK will be, I am sure, not soon forgotten.

CHICAGO MEDICAL SOCIETY.

OFFICIAL REPORT.

Stated Meeting, January 3, 1887.

The President, EDMUND J. DOERING, M. D., in the chair.

Dr. E. J. KUH read a paper on

THE ETIOLOGY AND CURE OF ASTHMA.

(See page 76.)

DR. J. A. ROBINSON, in opening the discussion, said: The facts, which are indeed facts, that have been related in this paper are of interest not only to the specialist but to the general practitioner. It has been a fact long known to specialists that obstruction of the passage of air through the nares will give rise to asthma, and a great number of articles have been written on this subject. It has also been demonstrated that when operations have been performed that cleared away these obstructions the relief from the asthmatic attacks was complete. This can be easily demonstrated by any physician. Cases of nasal polypus are quite frequent and they do not always fall under the care of a specialist. The operation is generally a very simple one, almost any physician, without any special training, can remove nasal polypi, and it is really wonderful to find how many cases of asthma are thus cured. As to asthma being due to other causes, I have no doubt of the truth of the observation made by the author, that is, that transitory swelling which takes place in the turbinated bodies in cases of mild irritation. I presume we have all noticed that when we are affected with an acute coryza and go to bed at night the narium of the side on which we lie become obstructed. This is undoubtedly due to the force of gravitation in a great many cases where the mucous membrane is especially sensitive. There is no

doubt that in a great many cases by the irritation of a probe, or the inhalation of dust, coughing can be produced resulting in asthmatic attacks. Therefore this demonstrates that reflex irritation of the nares is one of the causes of asthma, and it points out very clearly the method of treatment which should be instituted. The author has rendered a service in showing that there are such a large number of cases in which by destroying the turbinated bodies we can prevent the occurrence of reflex asthma. It would have been an interesting question to solve whether, in the case of the author's personal experience, a respirator worn over the nose so that the air could not pass through the nose unless filtered, would have been of any benefit in preventing the recurrence of the asthma.

Dr. H. Martyn Scudder: About five years ago, when practicing in India, where I had to ride on horseback a great deal in the sun and breathe a great deal of dust, I suffered frequently from acute attacks of coryza, accompanied occasionally by bronchitis and slight asthma. The nose was not much obstructed, and when an acute attack of coryza came on fifteen minutes sleep would cause it to pass away. Gradually the attacks became more severe and were accompanied and followed by some obstruction. When in London more than three years ago, Dr. Mackenzie wanted to cauterize my nose, but it was before the days of cocaine and I decidedly objected, as I thought the remedy worse than the disease. Since coming to Chicago I have been troubled less than when abroad. Quite recently I had my nose cauterized by Dr. E. Fletcher Ingals, and it has certainly relieved the trouble to a very great extent. My experience, however, was somewhat different from Dr. Kuh's, as the cauterization gave me considerable trouble for a week or two. It was followed by soreness and even by slight chills, and it made me feel out of sorts for about a fortnight, but it was successful in relieving the obstruction and I have had no more asthma or bronchitis, although once in a while I still suffer from attacks of coryza.

Dr. Josef Zeisler said: Professor Schnitzler, of Vienna, has published a number of cases in which decidedly polypus of the nose has caused asthma, and where by the use of the polypus the asthma was cured. I can confirm what Dr. Kuh has said in regard to the effectiveness of the galvano-cautery. I had a case of a boy 12 years old, who had nearly all his lifetime had a chronic eczema of the hands and asthma. Believing that the asthma was in casual relation to the eczema, I referred the patient to Dr. Kuh for treatment of the former trouble, while I prescribed local applications for the hands. Very soon both affections were cured and have remained so for the last year.

Dr. H. N. Moyer asked what the author means by the term essential asthma, whether he means reflex asthma or something different?

Dr. Kuh, in closing the discussion, said: By essential asthma, I, of course, mean, as I have been attempting to explain all the evening, reflex asthma; the same asthma which text-books classify as idiopathic or nervous or essential asthma. In lieu of these clouded expressions we have now, fortunately, a term by which we express an etiological meaning; namely, nasal asthma. It teaches us again that the term neuorsis always smacks of the hypothetical; and then when we speak of any pathological condition as a neurosis, we do so in order to cover ignorance. An asthmatic individual is not necessarily a "nervous" one, although I, of course, am not blind to the fact that some unknown factor must come into play in order to affect disease through nasal reflex. In regard to Dr Zeisler's remarks on the connection between polypi and asthma, I did not know that Schnitzler, of Vienna, had published forty cases of nasal polypus with asthma. I am greatly surprised that such a publication should have escaped my notice. I quoted Michel, of Berlin, as having reported 135 cases of polypus without asthma. There is no doubt that sometimes nasal polypi cause asthma, but as far as I am aware, only exceptionally so. Hack found that when a patient had polypus with asthma and he left the polypus untouched and cauterized only the turbinated bodies, the asthma disappeared, although the polypi remained in the nose. I think there can be no better evidence of the relative innocence of polypi than that experiment. I have been asked whether, if I had worn a respirator, I would have been free from asthma in traveling. I found that to be the case. For when I plugged my nose with cotton while travelling, I remained free from asthma. Dr. Scudder said that nasal cauterization gave him trouble for weeks. This could only have been through wound complication. An asthmatic may have very severe trouble for a week or less after cauterization, on account of the eschar.

In order to show how careful one must be in diagnosis, I should like to interpolate the following description: A patient with the mildest form of asthma, namely, the occasional involuntary deep, sighing inspiration, consulted me. The examination was negative with the exception of slight tympanitis (the abdomen should always be carefully examined in such cases) and slight swelling of the inferior turbinated bodies. I treated his mild constipation for weeks, without any benefit to his respiratory trouble. Then I cauterized, also without effect. At last I discovered that his alæ nasi were so pliable that when he inhaled through the nose they collapsed and occluded the nares. In regard to the claim that injections of boracic acid solution into the nose will relieve asthma,

I should simply refer to the uniformly condemnatory verdict of all specialistic practitioners against the use of the nasal douche in such cases.

DR. ELBERT WING, Pathologist to Cooks County Hospital, showed

A HEART SHOWING ATHEROMA AT THE BASE OF THE AORTA AND IN THE MITRAL VALVE,

and a condition described by the Germans as *prior chronic endocarditis*. The last mentioned lesion itself in the distribution of grayish streaks or patches on the endocardial surface, lying irregularly distributed over it. When this lesion has proceeded far enough fatty degeneration follows, shown by patches which appear slightly yellowish to the eye. The patches upon the valves are upon the anterior segment of the mitral. They are simply interesting and would cause no symptoms whatever. I do not know that such a case has any farther interest than that these things very frequently exist, and in my experience more than a majority of cases present lesions of prior chronic endocarditis.

DR. WING also exhibited

A LUNG SHOWING ONE OF THE POINTS OF DIFFERENTIAL DIAGNOSIS BETWEEN A CAVITY RESULTING FROM TUBERCULOSIS, AND ONE RESULTING SIMPLY FROM DILATATION OF A BRONCHIAL TUBE IN BRONCHIECTASIS.

That point is the persistence of bands, or stumps of bands, of the more resisting tissues which remain, sometimes passing across the cavity. As the fibrous tissues are more resistant than the others in the lung they are the last to disappear in the necrotic process. In this specimen there are a few cavities in the apex, some of them large, and the tubercular infiltration extends entirely to the base of the lower lobe of the right lung. There are extensive adhesion of the two layers of the pleura over the lung.

DR. W. T. BELFIELD asked for a repetition of the diagnosis distinction between cavities due to tuberculosis and bronchiectasis.

DR. WING said: A cavity resulting from bronchiectasis has a smooth pyogenic membrane, and upon washing it no stumps of these bands can be seen upon its floor, but in a cavity resulting from tuberculosis there is always some of these stumps or bands present. Sometimes they are very short, at other times long, and at times, as in this case, they are easily seen and demonstrated.

DR. A. V. PARK read a report of

A CASE OF ANTE-PARTUM HÆMORRHAGE AT TERM; RECOVERY.

On August 5 the author was called to see Mrs. S., a well-built and intelligent American-born Irish woman. This was her ninth confinement and she had had six miscarriages. She had received no injuries while carrying this child except running against an obstruction in the in the yard, which gave her a slight shock. The evening previous she had had severe hemorrhage but no real labor pains. A careful examination was made and the bedding found wet with blood, but no evidences of continued uterine hemorrhage. Vaginal examination revealed a rigid undilated os high in the pelvis. At 3 o'clock examination was again made and the os found soft and the head presenting. The pains were irregular and had no effect on the cervix. At 11 o'clock true labor pains came on; os soft and dilated, head at the brim of the of the pelvis, cervix rigid with each pain. The liquor amnii having all escaped with the so-called hemorrhage the expulsive efforts accomplished little. At 2:30 a. m. everything seemed favorable for an early termination of labor, but it was soon noticed that while pains were severe they were not propulsive. The patient was restless and thirsty and the danger of concealed ante-partum hemorrhage was realized. The only thing to be done was to deliver at once. The patient was placed across the bed and the membranes ruptured, which was followed by a small gush of blood. Then the forceps were applied and a still-born child delivered, which had probably been dead six hours. The child was given to the nurse, and with the left hand over the fundus of the uterus a gentle pressure was made. The uterus soon began to contract and expel its contents, the blood clots that were forced out filling a wash-basin. The placenta was high up and normally situated, and easily removed when the hemorrhage ceased. Ergot was given and the patient made as comfortable as possible. The author concludes that the hemorrhage was caused by a partial separation of the normally situated placenta, and that the head of the child acted like a ball-valve, which prevented the escape of the blood externally; that a portion of the blood found its way into the amniotic cavity, which would account for the slight hemorrhage that followed the mechanical rupture of the membranes previous to delivery. He thought that in cases of internal hæmorrhage during labor the treatment should depend upon the stage of the labor and the amount of blood lost. If the patient be in danger of sinking and the os dilatable, but the head within the uterus, delivery should be performed by turning. If the loss is moderate wait until the head descends into the cavity of of the pelvis. In all cases where possible forceps should be used for immediate delivery. The child is lost in almost every case of extreme hemorrhage.

DR. A. V. PARK reported

A CASE OF PYELITIS OF NINETEEN YEARS' DURATION, CAUSED BY A RENAL CALCULUS; RECOVERY.

The patient was 30 years old, of slight physique and nervous temperament. His sufferings were excruciating. First attack occurred when he was eleven years old, during convalescence from scarlet fever. He was an engineer, and when exposed while covered with perspiration his old trouble would inevitably follow. He had received treatment from some of the best physicians and surgeons, and had taken almost every kind of medication, but without relief. He had taken such quantities of narcotics that it required a phenomenal dose to affect him. He had never passed calculi with his urine so far as he knew, and the entire amount had been saved and examined time and again, always with negative results. Morphine was given hypodermically and a careful examination made, the urine being subjected to an analysis. Then came the question, what should be done for the patient? The best surgical authorities agree that renal calculi are generally composed of uric acid or oxalate of lime. DR. BELFIELD advises the injection of large quantities of alkaline water, and says that in pyelitis caused by renal calculi it affords the only hope for radical cure by medical means. Calculi have been dissolved by copious injections of simple rain-water, and the same result can be obtained by water which contains the proper ingredients to give it an alkaline reaction. On May 13, the patient was in great suffering. Morphine was administered, and a line of treatment mapped out which was followed faithfully. The patient was directed to drink Waukesha water often, in large quantities, and tincture of digitalis ½ oz., fluid extract hydrangea 2 oz., calisayæ enough to make 4 ounces were prescribed, one teaspoonful every six hours. A milk diet and ½ dr. Carlsbad sprudel salts in a glass of water before breakfast was advised. In order to facilitate the washing-out process the system was relaxed by anodynes, and hypodermic injections of morphine and atropine were given, and hot poultices applied. This treatment, with the injection of large quantities of water, was continued during the night. At 8 o'clock a m. the patient was free from pain and had passed a large quantity of dark-colored urine in which was a calculus weighing 14 grains, oval in in shape, with numerous beadlike elevations composed of uric acid On analysis the calculus was found to be composed principally of oxalate of lime. The patient said he could distinctly feel the stone when it dropped into the bladder. The treatment was continued and the kidney troubles soon ceased. It has now been seventeen months since the last attack and he is robust and strong.

THE CLINICAL SIGNIFICANCE OF ENDOCARDIAL MURMURS.*

BY WESLEY M. CARPENTER, M. D., NEW YORK.†

To CHARCOT has been attributed one of the wisest of modern medical sayings: "The facts are the main points in clinical medicine."

In these days, when the student of the natural phenomena of diseases stands submerged by the great waves of theory which roll in upon him, this saying is especially valuable. Yet its value suffers not a whit when it is applied in reviewing old subjects; for, unfortunately for the advacement of science, tradition frequently makes a more general and enduring impression than does fact.

Whilst canvassing for a subject on which to write a paper that would meet the requirements of the note of invitation received from our esteemed President, I became aware of the fact that a patient was laboring under a very depressing apprehension, excited by the statement of a physician that she had an incurable disease of the heart, and that the evidence of this disease consisted of the presence of an endocardial murmur. Almost immediately after becoming possessed of this grave information, she began to suffer from distressing palpitation, pain in the præcordial region, with more or less difficulty of breathing, etc., and these symptoms were regarded by the patient as those which indicate rapid progress of the disease, and also as precursors of an early termination in sudden death

She made a good recovery, however, under the influence of the assurance that her heart disease was not inconsistent with long life, and the additional aid afforded by hygienic measures, a nutritious diet, and the use of tonic medicinal remedies.

According to my observation, the foregoing case is not exceptional, and it occurred to me that it would not be amiss to make it the text of my communication.

About that time, also, I became aware of another fact—namely, that this subject had just received great consideration in a discussion which was opened at the British Medical Association, by a paper from SIR ANDREW CLARKE. The Lancet soon followed with an editorial containing most of the salient points of the paper and the discussion, together with critical remarks. To these communications I shall have occasion to refer in the course of this article.

When, however, I began to consult the writings of those who have been accepted as authorities on diseases of the heart, I was somewhat surprised at the absence of reference to the

* Read before the Medical Society of the State of New York, February 2 1881.

† Lecturer on Clinical Medicine, University of City of New York.

clinical significance of endocardial murmurs, although I found ample mention of the prognosis of chronic valvular disease of the heart.

I should state here that this paper refers to endocardial murmurs only; the exocardial are excluded.

I have been impressed with the thought that medical writers have too frequently interchanged the terms "cardiac murmur" and "valvular disease of the heart," as they would terms that are synonyms.

It has seemed to me that even SIR ANDREW did not make the clear distinction which might profitably have been made, and has used the one synonymously with the other. It is true that he says the murmurs in his cases were constant, which leads us to the inference that he excluded all those that have received the names "anæmic" and "hæmic," or "inorganic."

Among the cases he mentions is the following: "A chaplain to the London Hospital, being about to marry, thought it well to get his life insured, but when the medical officer of the company came to examine the candidate, he told him that he 'had an incurable disease of the heart.' When fifty years afterwards SIR ANDREW examined the man, he 'found the same bruit present,' on account of which he had resigned his position and given up his marriage.".

This must certainly have been a murmur that did not mean chronic valvular disease, else the opinion of ROSENSTEIN, that "the limit of life with chronic valvular disease is not far beyond fifteen years," is incorrect.

We may place in the same category DR. GAIRDNER'S case, that of a medical man, who discovered that he had "mitral regurgitant disease, also there was aortic obstruction," but there was no alteration in the size of the heart. There was no enlargement of the heart, and the patient lived many years in good health. This case is recorded as one of chronic valvular disease of the heart, yet there was no enlargement of the heart, although the murmurs continued for many years.

On the other hand, we may not be prepared to admit unconditionally that the opinion of ROSENSTEIN is not correct as to the limitation of life to fifteen years, in cases of chronic valvular disease of the heart.

It is not improbable that this lack of definition is a legitimate outgrowth from the discovery and development of auscultation. When auscultation came, physicians had a more certain method of diagnosis than they had previously practiced. The theory was that the examiner, on placing his ear upon the chest in the præcordial region, could hear abnormal sounds which had a definite relation to disease in different parts of the heart.

This doctrine, of necessity, encountered the vigorous opposition accorded to new theories, and at once it was subjected to the post mortem test. In other words, the *pathological* significance of cardiac lesions received the foremost consideration, and, naturally enough, a cardiac murmur came to signify organic disease of the heart.

Notwithstanding the fact that, then as now, post mortem examination failed, in many cases, to reveal the organic lesion clearly indicated by the cardiac murmur, the question remained, to a very large extent, that of *pathological* change *versus* the theory, and, at one time, the evidence was so abundant that some of the best observers of the day opposed LÆNNEC'S teaching as not being entitled to scientific recognition.

Notwithstanding the great advancements which have been made in both physical diagnosis and clinical medicine during the last half-century, this old impression, clothed with all the influence of a tradition, ever and anon comes to the surface with its natural force unabated, that endocardial murmurs mean organic diseases of the heart, and that organic disease of the heart necessarily means short life and great liability to sudden death.

This is an extraordinary statement, and it is intended to be so for those who are daily engaged either in teaching or in examining a large number of chests.

But, unfortunately, in by far too great a proportion of instances outside of these, the examiner places his ear against the chest, hears a sound, believes that it comes from the heart, and then concludes that the patient has an irremediable disease of this most vital organ.

In other words, the pathological significance of organic diseases of the heart has remained uppermost, and as a sort of tradition in the medical mind. Not over thirty or forty years ago, this belief had such a strong hold on the popular mind that it was regarded as a mark of prudence for all subjects of endocardial murmurs to carry their names in a conspicuous place within their hats, so that they might receive the attention requisite in case of their sudden demise.

Nor do we need to go so far back as this even; for, within the last twelve years, a student in one of our metropolitan schools bared his chest for the purpose of giving the members of a private class an opportunity to listen to the sounds of a normal heart. He was, and had been, so far as he knew, in perfect health. The teacher applied his ear to the student's chest, and said rather abruptly: "Why! here's a murmur, we shall have to get some one else's chest." This unexpected and unexplained announcement made so profound an impression on the student that he did not attend any more lectures that day, and finally he became so

restless and worried over what to him was a terrible revelation that he went home.

By dint of a little effort, however, he accepted the assurance that *his* cardiac murmur had no special clinical significance, and he returned and completed his course of study and graduated, and is now practising medicine in this State. Whence originated the belief entertained by this student that caused him to be so profoundly impressed by this off-hand statement made by his teacher?

The prime object of this contribution is to give a slight impetus to an already well-known fact, and to aid in correcting the impression that the presence of an endocardial murmur, of itself, indicates the existence of an organic disease of the heart, which necessarily has a grave prognosis with regard to duration of life and and the enjoyment of a fair degree of health.

The part of my subject to which I wish, in this communication, to direct special attention is included in the following propositions:

1. The only definite relation between endocardial murmurs and valvular diseases of the heart is that of determining exactly where the lesion exists. Even this has limitations.

2. Clinical studies and physiological observations have determined that no definite ratio exists between endocardial murmurs and the amount and gravity of valvular disease. A very loud murmur may accompany a very small amount of disease, and, *per contra*, extensive valvular and organic disease of the heart may exist unaccompanied by any cardiac murmur.

3. Endocardial murmurs, when present, enable us, as a rule to ascertain definitely which auriculo-ventricular opening is involved. They may indicate the amount of damage which the valves have sustained.

The Lancet refers to the fact that Dr. Stokes once gave a strong disapproval to what he heard a physician say to a distinguished and useful public man who had a murmur in his heart: "Sir, I hear your death-knell," and it then very pertinently remarks that "the great value of the discussion raised by Sir Andrew Clark and most ably sustained by Dr. Gairdner, Dr. Clifford Allbutt, Dr. Bristowe, and others, was not so much in any novelty of discovery announced, as in the evidence afforded by it of the wider and wiser view of disease taken by physicians and all good practitioners, and of their perception of the fact that the run of people with heart disease do not fare very much worse than other people, if they only had the sense to consult sensible medical men and follow their advice. It is half—it is two-thirds—of the duty of the physician to find out the favorable facts about disease. He is not a mere pathologist. a mere hearer of murmurs."

No less pertinent are the remarks of Fothergill, who says, "it is not well underrate the gravity of any case. It is equally desirable not to overrate it. It is all very well to comprehend the significance of a cardiac murmur, but it is not well to build upon it a superstructure which is not warranted by the facts of the case, and which tumbles down in time."

In diagnosis one thing is *essential*. The first consideration is to determine the entire absence of organic disease. It is sometimes very difficult to do this, but in the investigation auscultation plays only a minor part. For, as the late Dr. John A. Swett, said, "there can be no doubt that enlargement of the heart is far more certain and obvious in its physical signs than valvular disease, and is far more important also; the enlargement is the chief thing, the valvular disease is but an appendix, or sometimes a preface to the great work of mischief."

One thing is also *desirable*, and that is to determine whether the cardiac sound, the first or the second, is wholly or only in part displaced by the murmur. Here *only* auscultation can be made available, and it enables the examiner to decide with reference to the clinical significance of the murmur, by the fact that, when the heart sound is only partially displaced, the valve is only partially disabled. [See proposition 3.]

The condition of the heart with reference to these points, in any given case, furnishes the basis for an intelligent estimate of the clinical significance of whatever endocardial murmurs may be present, and also constitutes reliable data on which to form a reasonable prognosis.

While ready to adopt the opinion of Dr. Bristowe that "many people would lead a far more pleasant life if they did not know that they had a cardaic murmur," it is equally evident that the mere existence of a murmur should influence, to only a very limited degree, the prognosis in any given case. The main reliance should be upon other physical signs.

While, also, a persistent endocardial murmur doubtless indicates some deviation from an absolutely normal condition of the heart, it does not, by any means, indicate chronic valvular disease inconsistent with the enjoyment of a fair degree of health and long life.

From the above observations, as well as from data which time does not permit us to introduce here, the following conclusions have been reached:

First.—That endocardial murmurs and chronic valvular disease of the heart are not synonymous terms.

Second.—That the existence of a persistent endocardial murmur is not inconsistent with long life and enjoyment of a fair degree of health.

Third.—That the knowledge, on the part of the patient, of the presence of an endocardial murmur should guard him against exposure to all influences that may give rise to any of the

diseases which are liable to have cardiac disease as a sequel, or that will cause increased cardiac action.

A CASE OF SPECIFIC PAROTIDITIS RESULTING IN DEATH.

BY A. J. ROSENBERRY, M. D., WARSAW, WIS.

On May 27, 1886, I was called to see Mrs. V., æt. 67, who lived four miles in the country. Her previous health had been good but for some few days she had been troubled with dysentery and some vesical irritation. Prescribed for the pathological condition present and on calling three days later found the dysentery relieved, but the vesical trouble had developed into cystitis which I treated for three weeks with the result of finally relieving the trouble. On June 20, swelling of the right parotid gland appeared and is rapidly increasing, June 21, cystitis entirely disappeared but my notes say: "Swelling of right parotid is rapid and great, no rise in pulse or temperature; prescribed flax seed poultices, milk and other nourishment."

June 25. "Swelling of parotid extends half way to clavicle and upon the cheek, entirely closing right eye; swelling is very hard" Tonsil of right side at this time projected into the fauces so that it was difficult to swallow much nourishment.

June 29. Some pus behind lobe of right ear. Opened the abscess, also made two incisions into the gland in front of right ear, to relieve tension, as I was afraid of gangrene. General condition good; takes considerable nourishment; pulse and temperature normal, tongue dry.

July 1st. Tongue still dry, temperature and pulse normal. Abscess has evidently broken into the pharynx as pus and blood are expectorated. Discharge of pus from external auditory canal of right ear. Considerable discharge from the incisions anterior and posterior to the ear; opened them up with probe.

July 2nd. Tongue moist, pulse normal, swelling softer and smaller; strength good; general condition favorable, and I congratulated her on being much better. At 2 P. M., was sent for in great haste, as she was thought to be choking to death; found her in a somewhat stupified condition; subsultus was present, but she spoke and answered questions I put to her and seemed to realize, when aroused, what was going on; pulse 120, temperature 102°. General condition not so good; she had been taking pot. chlor., milk and gin; ordered stimulants increased; right tonsil projected into the fauces half closing that passage. Was able to swallow and did swallow gin and milk, while I was present.

July 3. Patient died at 11 A. M.: Stupor had developed into coma, in which condition she passed the night and morning preceding death. Passive congestion of the brain was the only explanation I was able to offer, then, or subsequently, probably from metastasis of the disease. I do not think the congestion could have been caused mechanically, by the pressure of the swollen parotid, for then it must have occurred previously; besides the left side was not at all affected, and that certainly would form egress for the blood sent to the cranial cavity.

I have been unable to find any recorded instance of death from mumps and for that reason consider the case sufficiently important to be reported. The disease is also, I believe quite infrequent in persons of the advanced age of this patient. Mumps was epidemic at this time which, coupled with the fact that there was no other known cause of the disease, was considered to establish the specific character of the disease.

Correspondence.

STIGMATA MAIDIS—CORN SILK.

It gives me great pleasure to add my testimony to the value of fluid extract of corn silk, which I have found especially efficacious in the treatment of catarrhal affections of the genito-urinary apparatus. It is also a valuable diuretic and stimulant of mucous surfaces, bringing about a healthy secreting action in surfaces chronically inflamed. My favorite method of using it in chronic cystitis, is first to dilate the bladder to its utmost capacity with tepid water, by means of a Nelaton's soft catheter and Davidson's syringe, and having allowed this to flow out, I then inject a tumblerful of clear water containing a teaspoonful of the corn silk.

In several instances I have observed marked benefit from the above process, the medication seeming to have a specific action when injected into the vesical cavity. Used locally in this way its effects are more dense, permanent and satisfactory than when taken into the stomach, as it then necessarily undergoes considerable modification before reaching the desired spot. In a short time after each injection the bladder is emptied of its contents, bringing away large flakes of pus, mucus, and broken down epithelium, and the patient experiencing decided relief shortly after commencing treatment.

So far I have failed to note anything but beneficial results from its use, and am fully confident that it will ere long occupy a high place in the list of remedies for the treatment of catarrhal disorders of the genito-urinary tract.

J. EDWARD GREEN, M. D.

MACON, GA.

AN EXPLOSIVE COMPOUND.

Is the third prescription on page 39 of current volume of the MEDICAL AGE liable to explode? I would refer you to the Druggists' Circular and Chemical Gazette, of New York, edited by HENRY B. PARSONS, which says that this prescription is dangerous. On page 11 of the issue of January, 1885, of that journal an account is given of an explosion of a similar mixture which had been prescribed as a gargle Also on page 75 and 76 of the same journal, in the issue of April, 1885, some comments may be found on the same subject.

DR. JACOBI, in his treatment for diphtheria, in PEPPER'S System of Medicine, gives a similar prescription containing tr. ferri chloridum potassii chloras and glycerin.

Now, I wish you would explain through the columns of the AGE who is right on this subject. I know this mixture is frequently prescribed, and if it is liable to explode the fact ought to be generally known. The quantity of the ingredients may have something to do with it. In DR. JACOBI'S prescription there are only 20 grs. of chlorate potassium to ʒ ii tinc. ferri chloridum and ʒ ss glycerin in a ʒ iv mixture.

J. G. STAIR, M.D.

BUCKINGHAM, ILL.

[The fact that this mixture has exploded with more or less serious results, is sufficient evidence of its dangerous nature. The potassium chlorate is liable to become decomposed by the free acid of the tincture of iron chloride, and under such conditions, it acts as a powerful oxydizing agent, possibly resulting in an explosion, if combined with easily oxidizable substances. We would suggest that some syrup be substituted for the glycerin, and that the potassium chlorate and tincture iron chloride be first mixed and gently warmed, and when the action, if any, is completed, the other ingredients may be added.—EDITOR MEDICAL AGE.]

STRICTURE OF THE ŒSOPHAGUS.

LOTTIE F., aged 19, had been treated for four years for an obscure gastric disturbance, during which time she was unable to swallow any solid food. When she came under my observation, the only diet for these four years—milk and broth—had also refused to enter the stomach. The patient was, therefore, threatened with starvation, and was willing to undertake any treatment that would promise relief.

I introduced a small-sized bougie, and found a stricture of the œsophagus a short distance above the cardiac orifice of the stomach. I continued the dilatation for several month, increasing the size of bougie until the stricture was completely overcome. The patient can now eat solid food as before the presence of stricture.

EXCISION OF THE TIBIA.

A lad six years of age, son of MICHAEL AUCK, of Bucyrus township, had been suffering from caries of the tibia, the result of periostitis, which commenced one year before. When he came under my observation the upper end was disarticulated, and about one inch denuded of integument and periosteum. Finding that the separation had extended the entire length of the bone, which had also become partially detached from its articulations with the ankle, after consultation with DR. J. D. LEA, who been treating the case for several months, it was decided to remove the bone, and after thorough etherization, I performed excision. The periosteum had attained unnatural thickness. The parts were carefully brought together, and antiseptic dressings applied, directions given to keep the leg in a fracture-box for three months, during which time there had formed a new bone, with very little, if any, shortening, the result being as useful a limb as the other. The mobility both of knee and ankle joints is complete, and the boy is a useful farm hand.

J. B. KREIDER, M. D.

BUCYRUS, OHIO.

Gradually the profession is being aroused to the situation. Says the Weekly Medical Review: Was there ever a more insane lot than we doctors the world over? Constantly engaged in efforts to increase the workers in our ranks, giving away the knowledge of our profession without money and without price, educating the people up to expecting medical service for nothing by the multiplication of free clinics and dispensaries, and last, but not least, but the only noble and unselfish thing of all, developing sanitary science to the point of preventing the diseases which it is our "regular business" and bread and meat to cure.

The late JOSH BILLINGS was not a physician, but he had much knowledge of which physicians should be possessed: Doktors are not all quaks; you have got wrong noshuns about this. Doktors, lawyers and ministers have a hard row to ho; they have to deal with the kredulity, knavery and fears ov the people—three ov the most difficult traits in human natur tew handle. If i was a doktor and understood my bizziness, i should doktor my pashunts and let the disease take care ov itself. More folks are kured this way than enny other.

A few subscriptions to the AGE still remain unpaid, and the publisher wishes to be saved the trouble and expense of more specific notice to delinquents.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., FEB. 25, 1887.

Editorial.

LATERAL CURVATUE OF THE SPINE.

The frequency of deformity and disease of the spine is increasing. It has its origin in weakness and disease of the spinal muscles. Bad hygiene and bad breeding blight and impair the blood converting properties of the muscle fibers so that they no longer elaborate the quantity of tone and energy that is necessary to maintain the equilibrium of the spinal column.

One side the muscles will exert too much force, and the vertebræ being soft and yielding will bend under the strain. It is not the mere curvature of the spine alone that makes the trouble in these cases; but the distortion of other organs which follows in consequence of the curvature. The chest is deformed, its capacity diminished, the shoulder is elevated, and the usefulness of the arm as a lever impaired. The pelvis becomes tilted; one hip rises higher than the other and a limping infirm walk grows upon the patient. The pelvis may be so abnormally inclined through a curvature in the dorso-lumbar region of the spine that its diameter becomes too narrow to permit the passage of the fœtal head in parturition, making the operation of Cæsarian section necessary. As indicating the widely-removed nature of some of the consequences of spinal curvature we should not forget that one in every three cases of that deformity will have more or less "flat foot." Every surgeon knows how difficult the treatment of a lost or weakened plantar arch is. Correcting the spinal curvature where it is coexistent aids to restoring the foot.

The comprehensive term "asymmetry of limb," and the condition of health caused by it are used by some writers quite flippantly in indicrting the causes of lateral curvature of the spine. The fact that one limb is often shorter than its fellow is set forth by these gentlemen as cause sufficient to account for all other deformities, and steel and shoe are furnished as infallible cure-alls. But we think it just as reasonable to assume that the difference in the size and weight of the right and left sides of the brain and skull may operate as a cause of spinal curvature. We o.ten see one side of the head bulged out with preponderance of contents while its opposite side is quite flat and empty. To carry such a head and maintain the spine erect would necessitate the exercise of great balancing force by the spinal muscles; and the column might bend and become curved under the strain.

This will indicate the need for some further explanation of the probable cause of spinal curvature; as we see it most frequently without any breaking down of the various structures and inflammation. The exercise of the muscular system certainly has much to do with the cure of the deformity and it may not be amiss to assume that many of the children—girls who are afflicted with it—have contracted it by sitting in cramped positions over improperly constructed desks. School desks have been held accountable for many of the cases; and the first task in treatment of any case should be to enquire into the position used by the child for the largest number of hours.

Badly built shoes have led to the habit of standing chicken-like upon one foot. Many children whose heels are high and narrow rest their weary pedals in this way, and no doubt often strain the spinal muscles so that they become too weak to perform perfectly their part in the act of equilibration.

To get an accurate knowledge of the average case of spinal curvature and its attendant or sequential condition, one must study all the muscular habits of the patient. The way in which she uses her arms; carries her head; wears her shoes and clothing, may each and all be factors in the maintenance of the abnormal curves.

Treatment depends upon two conditions, usually: 1st. Is the spine simply distorted by the action of weight on muscles? 2nd. Is it curved in obedience to changes which have taken place in the bony structures? Gymnastic exercise is of great value in treatment, after all bad habits have been corrected. The use of the horizontal bar and swing by which to suspend the body by the arms, so that the great muscles of the spine and shoulders, trapezius and and latissimus dorsi may be encouraged to improve their tone. The erectores spinæ and longissimi dorsi are also stimulated by such treatment. But the most important thing is to properly support the spine when it is weak, and curved by a properly fitting plaster jacket. Steel and iron have almost entirely given place to plaster, in the hands of surgeons who have acquired the art of working the latter.

Diet and medicine are of value in most of the cases in providing for the nutrition of the body generally.

Medical Progress.

Fluid Extracts vs. Tinctures.—Some facts in regard to these two classes of preparations have occurred to me, which, in the present progressive age of our science, I feel it my duty, as it is my pleasure, to place before the medical profession.

The practitioner of medicine who realizes and appreciates the duties incumbent upon his office and the relation he bears to humanity, affording him, as it does, the means by which to relieve its sufferings, is not content to say, "let well enough alone," and thus move on throughout his career in the old grooves of his predecessors, if the "new way" is really an improvement on the old, or suggests to his mind the probability of its being worthy of consideration and trial.

What is a fluid extract, and what does the term convey to us in administering remedies which may be rendered most available in this form? As defined in our United States Pharmacopœia, "fluid extracts are permanent concentrated solutions of vegetable drugs, made of such strength that one fluid ounce contains the medicinal principles and represent the virtues of one troy ounce of the drug." To extend the definition and make it of more practical value to the prescribing physician, one *minim* of the fluid extract is equal in strength and virtue to one *grain* of the drug, possessing the great advantage, which is universally conceded, of being a solution of the active and freed in a great measure from the inert principles of the crude drug. Therefore, in prescribing a fluid extract, either separately or in combination, we give in such menstruum as to render our agent more palatable, and at the same time more efficacious, a solution of the active principles of the drug we desire to use, from which preparation of the drug we might positively expect to obtain identically the same physiological effect as that which experiments by our most careful and competent observers, and long experience by ourselves and predecessors have taught us to expect from the administration of the same agent in its original state.

Thus you see we gain at a bound, as it were, the object for which both medical men and pharmacists have so long been striving. No doubt some skeptical readers will say, have we not the available preparations in the form of tinctures, and do we not, as we have in the past, obtain from these the desired results? To the first of these questions I answer, conscientiously, no. To the second, I will give more consideration in due time, and hope to meet the objections which will naturally arise, as they have been met and overcome in my own mind.

Are tinctures as available to the prescribing physician and as conveniently used as the fluid extracts? "Tinctures are "alcoholic solutions of medicinal substances;" as such, and by virtue of the necessarily various processes by which they are obtained, they cannot be made of uniform strength—uniform in the sense which we, as prescribing physicians, would have them. For instance, one tincture will represent 20 per cent. by weight of the strength of the drug and another will only represent five per cent. And why must this be the case? Because the nature of the plants has willed it so. One plant holds its active medicinal principles in a readily soluble state. As soon as the alcoholic or ethereal menstruum is poured upon the powdered drug, it yields up its active virtues and only a residuum of inert substance is left, while another plant contains a much smaller per cent. of the active principles, or becomes exhausted by the menstruum less readily. Thus you see how utterly impossible it is for us to have, in accordance with the justly fixed laws of the pharmacopœia, our tinctures of a uniform strength, representing relatively minim for grain; whereas, the same facts which militate against the use of tinctures recommend fluid extracts as possessing advantages which are beyond question, and the nature of these facts is such that their truth will be at once recognized by all intelligent and practical observers.

In the manufacture of fluid extracts—and in this I have the high authority of Parke, Davis & Co. and E. R. Squibb—the relative connection between the drug and the menstruum is considered well, and demonstrated by experiment, before the process of exhaustion is begun. Such menstruum is selected as will most thoroughly exhaust the drug of its active medicinal principles, and having obtained these, free from inert and deleterious substances, will preserve them in a pure and healthy state for an indefinite space of time.

When a specified quantity of the drug has been exhausted, it is ascertained by an accurate analysis of the product what per cent. of the active principle it contains. If the product is below the standard of fluid ounce for troy ounce, minim for grain, it is raised to the same by evaporating off a portion of the menstruum and adding the required per cent. of the active principles of the drug which have been preserved for a similar process. On the other hand, if the nature of the drug is such as to place the product above the required standard the same being proven by a similar analysis—its strength is reduced by dilution, thus accomplishing the uniformity of strength which is of such vast importance in the preparation of our medicinal substances, and giving to us a fixed law by which to be governed in formulating our prescription.

As to the mode of administering fluid extracts, I am well aware that many and seemingly just objections will be raised, especially in regard to those which are administered in minute doses or to children. But if I was as sure of all my readers being open to conviction as I am that I possess the means of convincing them, I should rest content in the eventual precedence of fluid extracts over tinctures. It has been my privilege to study, practically and closely, the manipulation of fluid extracts, and I state, without hesitation, that they are as convenient and easy to administer in minute doses, either separately or in combination, as tinctures. You say that there will be a precipitation of the resinous matter if you prescribe a fluid extract—aconite, for instance—alone, simply using water as a vehicle. I say there *will not*, in proof of which I have on my desk at this moment a mixture which has been standing for several days, formulated thus:

℞ Fld. ext. aconit. rad., ♏ vii.
Aquæ puræ, ℥ i.
M.

and it stands as perfect a mixture now as when first prepared. On the addition of the water to the fluid extract there occurs a slight—very slight—milky appearance, which, however, is of no importance whatever, and, in fact, is no more than will occur on the addition of water to any of the tinctures.

If it is desired to give aconite, or any other agent used in minute doses in a combination, there are various menstrua which may be used. Of these I have found glycerin to be the best as well as the most palatable. In pneumonitis, for instance, or any disorder in which the laxative effect of the glycerin is not contradicted, if you desire to administer a febrifuge, you will find the following most efficacious fo an adult:

℞ Fld. ext. aconit. rad., ♏ xxxii.
Spts. ætheris nitrosi., ʒ ii.
Glycerinum q. s., ad ℥ ii.
M. S. Teaspoonful,

which makes a mixture beautifully clear, permanent and very palatable—three advantages which are well worth our consideration.

In administering astringents, the advantages possessed by fluid extracts over tinctures are twofold. First, the astringent properties of the drug, being held in perfect and permanent solution in a practically inert menstruum, are in such a form as to come into more direct contact with the mucus surface upon which we desire them to act, thus accomplishing our object more promptly and proving more satisfactory both to our patients and ourselves. Second, when we are administering an agent of which it is necessary to give large doses, as from one to four fluid drachms, we give and obtain the result of our agent alone, and do not load the system with alcohol, which is objectionable both from a medical and a moral standpoint, but which, from the nature of tinctures, is unavoidable.

In equal manner as these advantages apply to astringents, do they apply to each of the seventy-seven officinal preparations of the class termed fluid extracts, which we have laid down in our pharmacopœia, its object being to give us our medical agents in the most concentrated, permanent and palatable form.

As tonics and alteratives, we find fluid extracts equally available and convenient—a fact which, I believe, is even now pretty generally conceded. In their administration, if it is necessary to reduce their strength, and you prefer, as I do always, to make the directions a teaspoonful rather than so many drops—for very few patients will drop medicine accurately—use glycerin or equal parts of glycerine and water as a diluent, and you will obtain a mixture which is palatable.

And now finally, but in nowise of least importance, do we obtain the same therapeutic effects from the administration of fluid extracts which we have learned to expect from the use of tinctures? To my mind this question only suggests itself as one which will very naturally arise, and probably create some doubts in the minds of my readers, and not as one which will be difficult to meet, and answer as satisfactorily to such doubting minds, as it has been affirmatively decided, both by experience and observation, in my own. We may not only expect an equally good, but a better result from the therapeutic application of fluid extracts, to prove which statement, it is only necessary to recapitulate the advantages which have been set forth in the foregoing remarks. We have in fluid extracts concentrated and permanent solutions of the medicinal virtues of the drug, dissolved and perfectly suspended in such menstruum as is practically inert, and involves no danger of decomposition, from which we may positively expect to obtain the direct effect of our agent, in its pure, unadulterated state, upon the system. Let us, for example, take ergot of rye, which is unquestionably one of our most valuable medicinal agents. What physician of the present day, who has kept pace with his profession, would think of administering the tincture of ergot as oxytocic, or to relieve congestion of the spinal cord, or pulmonary hemorrhage, when long experience and observation have proven so conclusively the superior value of the fluid extract that the tincture has become almost entirely obsolete?

Thus, both theoretically and practically, the subject of fluid extracts as a class of preparations which are superior to tinctures, not only in convenience of administration, but in their physiological and therapeutical effects, presents itself for your consideration. To those who do consider and possibly accept my views, I extend my best wishes for the success of their adoption, and to those who do not, I extend a wish equally sincere in behalf of their continued use of the old class of preparations.—H. S. Lott, M. D., Augusta, Ga., in *Atlanta Med. and Surg. Jour.*, Feb., 1887.

The Dietary of Bright's Disease.—The importance of the dietary in Bright's disease is all the greater in that medicines exercise comparatively little influence upon its progress.

The form of Bright's disease here treated is the chronic one, where the kidneys are "granular," "contracted," "gouty" or "cirrhotic." This is a slow development of connective tissue (a parenchymatous inflammation) throughout the structure of these organs, which contracting—as is its nature—destroys the secreting and tubular portions. Some portions are destroyed as regards function, while others remain normal and uninjured. At least the destruction is so extensive that the kidneys become quite inadequate to carry out their duty, and the organism perishes.

The opinion of the profession (as regards its members under fifty years of age) is that the main cause of this chronic inflammation is the output of urates by the kidneys. Mammalian kidneys have the soluble urea as their form of nitrogenized waste, while urates belong to animales with a three-chambered heart and a solid urine. When, then, the mammalian liver forms this primitive urine the kidneys become injured by casting it out. Long ago Dr. George Johnson, F.R.S., the respected professor of the Practice of Physic at King's College, and a recognized authority on kidney disease, wrote: "Renal degeneration is a consequence of the long-continued elimination of the products of faulty digestion through the kidneys."

Recognizing, as we do, that under certain circumstances (often mental strain) the liver falls back upon this primitive urinary staff, it is obvious that the rational plan of meeting

the difficulty is to reduce the albuminoid elements of our food to the needs of the organism rather than the cravings of the palate. The bite of solid meat so acceptable to the Anglo-Saxon has led him to cultivate flocks and herds to a point of excellence unattained by other races. The beef and mutton in other countries will not furnish solid joints; it has to be hashed and stewed and made into ragouts in order to be palatable. Even a leg of mutton stuffed with onions is but indifferently good. A "Wiener Schnitzel" is a veal cutlet and the continental equivalent of our steak and chop—not forgetting *Fillet de Bœuf*. The "plain roast and boiled," the pride of the Anglo-Saxon housewife and cook, are largely responsible for the prevalence of this form of Bright's disease amidst Anglo-Saxon peoples.

This statement is not rashly hazarded as a specious and ready generalization. It is the outcome of careful thought on the matter.

In England at least the impression exists that simple fare—"plain roast and boiled," is innocuous. It is a murderous fallacy! It is just the abundance of meat—sapid, palatable, readily prepared, stimulating—that is the bane of so many men. It would not be too sweeping a generalization to say that the lady who dines at home is comparatively free from Bright's disease; while the business man who takes his midday meal at a restaurant and then dines at home in the evening is the victim of Bright's disease *par excellence*. As he looks down the ménu for his lunch his eye lights upon dish after dish in the composition of which lean meat forms the integral factor.

This fact cannot be impressed too distinctly on the mind. To traverse the statement by pointing to the fact that many men notoriously consume large and unusual quantities of such animal food with apparent impunity, is merely to state that the human liver is in many instances equal to converting into urea the whole surplusage, or *luxus consumption* of albuminoid matter. It leaves unaffected the fact that when the liver is unequal to such complete conversion, and reverts to the formation of urates it becomes a wise and prudent measure to reduce the albuminoid elements in the dietary to the wants of the body.

There is a strong impression abroad among medical men who have paid great attention to the subject, that the lean of the larger animals has a stronger tendency in the metabolism of albuminoids to form urates than any other forms of albuminoids. This impression must just be taken for what it is worth. It is sufficiently a matter of faith with the writer to inspire conduct, as his butcher realizes to his cost; while the fishmonger and the greengrocer benefit by it.

The *entrées* and made dishes of French cookery are far less pernicious than "the roast beef of old England," and its congeners. They consist to some extent of lean meat, it is true; but they also contain notable quantities of oil and vegetables.

The man who is held to be the subject of chronic Bright's disease should banish the solid joint from his table; except, maybe, on Christmas day. The steak and chop should be indulged in rarely, and when eaten, not be devoid of fat. The veal, or rabbit, or beefsteak-pie should not be without a due proportion of fat.

The same may be said of the meat pudding, the hash, or the Irish stew, and the currey. He should have one vegetable course at dinner, and, what is more, ought religiously to partake of it.

White meats, as chicken, are less objectionable than brown meats; but, after all, it is but a matter of comparison. One patient obeyed his instructions to the letter, but grossly violated them in the spirit. He was a blue-blooded Patrician, inheriting an insufficient liver—illustrating the truth of the adage, "the fathers have eaten sour grapes and the children's teeth are set on edge"—whose urine was laden with lithates. Meat being forbidden but fowls permitted, he explained that he "had passed the joint but laid into the turkey," as a gastronomic rule. A sharp attack of articular gout opened his eyes for him.

Of what then should the dietary of the man with chronic Bright's disease consist?

Breakfast: Oatmeal or hominy porridge, hominy fritters, followed by a little fish with plenty of butter to it; or a slice of fat bacon, or pork. Fat, fish and farinaceous matters. Hominy and fat pork for the less affluent.

Lunch or supper: Mashed potatoes well buttered. Other vegetables well buttered. A milk pudding made without an egg. Biscuits of various kinds and butter, with a nip of rich cheese.

Dinner: Soup containing plenty of vegetable matter, broken biscuit, or sago or vermicilli. Cream, in lieu of so much strong stock, should lurk in the soup tureen; especially in white soup. This should be followed by fish in some form; a course of vegetables, as stewed celery, chopped carrots, a boiled onion, leeks, nicely prepared potatoes, as "browned potatoes" a la Marion Harland, asparagus, or "scalloped tomatoes" and corn or "boiled corn." Then should follow apple-bread pudding, Maud's pudding, bread-and-raisin pudding; and, if the digestion can be trusted, roly-poly pudding, sweet pudding, and fruit pies. Stewed fruit, with creeled rice, rice milk, or other milk pudding is good, or better still, cream. Then comes the biscuit, or crackers and butter. Dessert with its many fruits should never be omitted.

The reader who prefers something tasty and piquant will exclaim this is too much in "the baby-food," or the "nursery line" for him, and asks for some game, or some toasted cheese. Well! in strict moderation let it be—as the tasting of forbidden fruit.

Where something more sapid is fancied let it be anchovy toast, herrings skinned, cut into inch lengths and fried on toast, sardines on toast; possibly a little caviare, herring roes and millets, or mushrooms. Certainly Paté de Foie Gras—all prejudices to the contrary notwithstanding.

There is a great deal of toothsome eating in a dietary suitable for a man with Bright's disease, all the same.

Eggs, ordinary cheese, and fish roes, are all highly albuminous, it must be remembered.

Fowls, chicken, game, are meats less objectionable than joints; but again it is a matter of comparison.

From what has been stated above, it is clear that "hotel dietary" is as unsuitable for the person with Bright's disease as it is to the dyspeptic. Travel is not prudent for either. They had better keep to a private house with cookery adapted to their special wants.

Then as to drink. The interest in the matter centres round alcohol. Other than alcoholic beverages are beyond contention; except, perhaps, milk, which contains a notable proportion of albumen in the form of caseine. If it be taken as a beverage, or as a food-adjunct its composition must be borne in mind, and the other foods be sparing in albumen.

Probably light wines are practically innocuous, that is in moderate quantities; as is cider. Possibly the same may be said of the light lager beers, as Pilsener, but ales brewed on the English plan exercise a malign influence upon the liver. This applies to porter and stout. Then as to spirits and waters, aerated or other! Opinions may differ. There is much less Bright's disease in Scotland, where oatmeal porridge and whiskey go together, than in England, with its beef and beer. The reader can draw the inference.

There is no valid proof that alcohol in moderation tends to add further to the morbid process, which, bit by bit, is slowly and insiduously working the ruin of the kidneys. On the other hand, beef-tea often does much mischief. The meat extractives it contains, though not food, are at the head of the descending series, ending in uric acid and urea, and add to the work of the kidneys.

One exquisite beverage, palatable and nutritive is made with some malt extract and aerated water. Unfortunately, in order to prevent fermentation, a malt extract has to be reduced to the consistency of treacle. This viscidity renders it troublesome to handle. The readiest plan is to get the cook every morning, or second morning, to dilute a certain amount of malt extract with an equal quantity of warm water, and beat it to a syrup. Fill a tumbler one-third full with the malt syrup then fill with aerated water. This is a glorious malt liquor for a teetotaller—or any other man!—By J. Milner Fothergill, M. D., Edin., Hon. M. D. Rush, Ill.; in *Journal of Reconstructives*, Jan. 1887.

Management of the Sick Room.—It is so generally the custom of medical men to leave the management of the sick room to the friends of a patient or to nurses, that it seems to be almost forgotten that this is, in a remarkable degree, a professional duty. "Treatment" does not consist wholly, or indeed chiefly, in the administration of drugs. The surroundings of the sick are not less important as agents of cure than the medicines given to them. Indeed, we will go so far as to say that in the best and most physiological methods of therapy drugs are only admissible as *aids* to the arrest of disease and the recovery of health, which Nature will accomplish if only the case be so conditioned as to remove obstacles out of her way, and facilitate the processes wherby she is working. The scientific therapeutist regards the placing of his patient in circumstances favorable to convalescence as the first and most urgent step to take, and it is therefore impossible for him to look upon the management of the sick room as of trivial or even subordinate importance. We have no thought of attempting to determine the particular conditions required for the recovery of the sick. Obviously these can only be indicated by the needs of each patient. We believe one and all *systems* of mangement must be open to the fatal objection that they do not deal directly with the lesser needs of the individual; and these lesser needs are in practice the most important. The point on which we are especially anxious to insist is that the practitioner ought to make the management of the sick room his most solicitous care. To relegate this part of his duty as a minister of health to a nurse, however skilled, or friends, however intelligent and solicitous for the welfare of the patient, is to surrender to others a power which may be either wasted or applied obstructively, with the best of intentions; and simply because, being dissociated from the exhibition of drugs, the management of the sick is no longer felt to be what it really is—namely, an integral and elementary part of treatment.

To manage the sick room wisely and efficiently, the practitioner must be so thoroughly versed in all the details of nursing as to be able himself to do, if necessity arises, all that he expects of others. The best illustration of what we precisely mean may be formed from the position of captain commanding a ship in a storm. He not only possesses a general notion of what ought to be done, but he is practically acquainted with every rope, spar and sail in the vessel, and he could, if it were physically possible, perform the whole duty himself. He can supervise, because he has himself passed through every grade of seamanship, possesses the knowledge of *how* things are to be done, as well as what to do in the circumstances. Now we greatly fear that anything approaching this practical familiarity with the details of the duty devolving upon a medical practitioner as a minister of health, is rare, and daily becoming increasingly difficult to find among the most advanced and theoretically competent workers in our profession. Division of labor is no doubt a necessity of progress, but we cannot regard without uneasiness the erection of nursing into a specialty; separate from, and in a large measure independent of, treatment. The profession is not, we think, aware of the magnitude of the sacrifice it is making in allowing this province of the art of healing to pass out of its grasp. The development of nursing as a craft, has grown out of the neglect with which that function has been too long treated by those who ought to be its principal promoters and directors. The condition of matters exposed by Charles Dickens in connection with his personification of the old-fashioned nurse as "Sairey Gamp" did permanent service; and the nurses of to-day are confessedly as superior to their predecessors of forty years ago as the medical men of the present time are better provided with instruments of precision, and more skilled in the knowledge of both health and disease than those of the last or a previous generation. Nevertheless, we cannot but feel that against this gain to the interests of good management in the sick room must be reckoned the very grave fact that the most erudite and expert of our cloth to day are incomparably, and almost of necessity, less able to direct and control the conditions of the sick than the practitioners of a time when the average attainments of the scientific physician or surgeon were immeasurably less considerable than those of the least advanced and accomplished of our contemporary doctors. There is no marvel in this fact, because nowadays the details, and much

more than the details, of the art of nursing are left to a class of persons who, whatever their devotion or intelligence may be, are certainly not qualified to take the position of medical practitioners. It is not with any degree of disrespect to the class of skilled nurses that we protest against the growing evil of surrendering a large and most potent part of the art of healing to those who are not in a position to master it. No lasting success can possibly attend the separation of nursing from medicine. The doctor who does not himself direct the nursing of his patient in all its details cannot be held to have control of even half the appliances of cure, and, for anything he can tell, the manner in which his patient is treated during the intervals between his visits may be such as, though admirable in themselves, must prove antagonistic to his own method and policy. We are not now thinking of the disastrous effects of bad or even careless nursing, but of the very best that can be procured. Nursing ought to play a leading *rôle* in treatment, and therefore it should be one of the first considerations of the practitioner. His should be the guiding hand in everything that concerns the sick, and to this end his authority and influence should be paramount. A grert point is gained when it can be said of a practioner that when he appears on the scene he takes not only general but specific control of the whole management of the case, and personally directs every detail. In no other way can perfect unity of aim and policy be secured. It may be argued that the busy practitioner has no time to spare for thus entering into matters; or that he descends from a high professional position when, for example, instead of contenting himself with simply ordering a poultice, he takes pains to ensure that it shall be properly made. How strangely erroneous such notions as these really are will appear when we reflect that the most successful practitioners have been, and still are, those who possess, and do not scruple to apply, the most minute acquaintance with the art of nursing—a knowledge for the most part either acquired by painful experience in their own families or obtained by years of observation and practice in the wards of hospitals where homely rather than ornate systems of nursing were in operation. It must be frankly confessed that we do not see how the students of to-day are to learn the art of nursing in such a way as to render them really able and useful practitioners in private families, seeing that the management of the sick chamber is an art and mystery studied and practiced by a separate class of non-medical persons, who cannot share the practitioner's responsibililty.—*The London Lancet*, Jan. 29, 1887.

ETHYL BROMIDE IN OPHTHALMIC SURGERY.—DR. S. LATIMER PHILLIPS thus writes in the New Orleans Med. and Surg. Jour.:

In ethyl bromides we have a most thorough, safe, and efficient anæsthetic when the state of anæsthesia is to be of short duration, and in the hands of a surgeon who is familiar with its administration.

It is peculiarly well adapted to the practice of ophthalmic surgery, where the bulk of operations are painful, but of short duration. Then its effects are so evanescent, and as a rule its administration is followed by no unpleasant symptoms which so often follow in the tracks of chloroform and ether, such as headache, nausea, vomiting, excitement, etc.

To one who has never seen this anæsthetic used, it is indeed surprising and pleasing in the extreme, to see now easily the patient is brought under its influence, the operation performed, and in a few minutes the patient restored entirely to consciousness, and able immediately to go about his business, unaware, but for being told, or the soreness consequent upon the wound made, that an operation has been performed, which otherwise than with an anæsthetic would have been most painful.

It is hard for me to understand how anything so beautiful and marvelous in its effects should be so neglected by the profession in general. It is true, death has been caused by its use, and all are more or less familiar with the cases reported by DRS. J. MARION SIMS and LEVIS; the latter, one of its earliest advocates. In DR. SIMS' case the operation was an extended one—and it certainly is not well adapted for such—BATTEY'S operation for the removal of the ovaries. The patient was kept under the anæsthetic for an hour and a half, she came from under its influence, but shortly died with symptoms of bromide poisoning. Chemical analysis of a sample of the preparation used in this case was made, and it was found to be impure. DR. LEVIS' case—vesical calculus—was far gone in phthisis pulmonalis, a case which, under ordinary circumstances, ought to have prohibited the use of any kind of anæsthetic.

I have used it hundreds of times in ophthalmic surgery, and have seen it used as many more, and as yet have to see my first case of trouble due to the ethyl.

In all these cases the anæsthesia was of short duration, and in the majority only one administration was required at the same sitting. In some of the more lengthy operations where the inhalation had to be repeated, I have seen vomiting follow, but where only one was required, I cannot call to mind a single case of this.

When ethyl bromide is given by inhalation there is at first a short stage of excitement; the pulse quickens; the respiration increases in frequency; pupils are semi-dilated, conjunctivæ congested, as are face and ears, which remain so throughout the anæsthesia, as long as there is no danger. After a few strong inhalations have been taken, the muscles relax; the reflexes are abolished, as is shown by touching the cornea, without spasmodic contraction of the orbicularis muscle following. The patient is now ready for operation, and one has to be quick, for this stage only lasts for half a minute or so in most cases.

The means I employ in the administration are these: A towel is folded in the shape of a cone, made to fit nicely over the nose and mouth, having previously laid a piece of thick paper between the folds of the towel to prevent any escape of vapor. The cone can be held in shape by one of the large pins generally worn by ladies to keep the bonnet secure, the point turned towards the apex of the cone to prevent it sticking the patient if the towel should be unduly pressed over the nose and face. It would be well at this point, in case the patient is an adult or child old enough to understand, to explain to them that the impression will be a choking one, but that they will not choke

ıd instead of struggling to get free, they must
y and blow the napkin from the face, for
aking such forced expirations they are bound
take an inspiration, and soon get a goodly
ıpply of the vapor. Children will cry; this is
l the better—they will soon take in enough to
e anæsthetized. A half to a drachm-and-a-
alf will be poured into the apex of the cone,
ıd the latter applied over nose and mouth
ghtly. A few deep inspirations, and the pa-
ent is gone.

Some patients will have stertorous breathing
ıd foam at the mouth; this means, as a rule,
ıat they are pretty well under its influence,
ıt need not frighten one. In young children
haling ethyl bromide, there will often be a
laxation of the sphincters, and an evacuation
fæces or urine. This can be provided for by
aving at hand a rubber blanket to put under
ıe child and protect the couch. With this
ıæsthetic all operations that take only a short
me can be done; such as splitting puncta,
robing lachrymal duct, removal of tarsal
ımors, optico-ciliary neurotomy, tenotomies of
ıe recti muscles in children too young to bear
ıe operation under cocaine, and adults too
mid, and many other operations in oph-
ıalmic as well as general surgery, which will
adily be suggested to the mind of an apt
ırgeon.

I feel sure that any one after giving ethyl
romide a fair trial as an anæsthetic in all
ıses where the operation is to be one that will
ot take much time, and which, without arti-
ial sleep, would be too painful, will agree
ith me that it is by far the most preferable
nown.—*Med. and Surg. Reporter*, Feb., 1886.

THE USES OF ICHTHYOL IN THERAPEUTICS. Some curiosity has been felt by physicians to
ıow whether the remedy known as ichthyol,
sulpho-ichthyolate of soda, has any special
erits, or deserves to be treated as one of the
ımerous proprietary drugs forced upon the
arket by enterprising manufactures. It seems
ıt fair to judge this substance upon its merits,
ıce it was introduced by a man of unques-
oned prominence and skill in dermatological
ience—PROFESSOR UNNA—and received at
s hands an apparently careful physiological
udy. Accounts of UNNA'S researches are
ven in the Journal of Cutaneous and Venere-
Diseases of September, 1886. LORENZ con-
ibuted some results of his experience in the
eutsche Medicin. Wochensch. in 1885. STEL-
AGON and PIFFARD have written briefly upon
(Journal of Cutaneous and Venereal Dis-
ıses, November, 1886) So also has GECE
azette des Hôpitaux Quarterly Compendium
Medical Science, October, 1886, p. 447). Some
ery successful experiences have been reported
om its use in the Charité Hospital at Berlin
Iedical and Surgical Reporter, January 8,
87), and DR. JOSEPH ZEISLER writes upon it
length in the Chicago Medical Journal of
ecember, 1886. DR. DUBELIR has also given
ıe results of his use of it in several cases of
ıeumatism (Rueskaya Meditsina, August 10,
86).

LORENZ speaks in high terms of its value in
ticular rheumatism, when applied externally
er the affected joints.

DUBELIR treated eight cases with it, six be-
ing of acute and two of chronic rheumatism. He used the drug both internally and externally, and found that it relieved the pain, but not the swelling. He recommends it, therefore, only as an anodyne. Ichthyol was also given for rheumatism of all types at Charité Hospital.

In skin diseases DR. STELWAGON found that in a small proportion of cases of acne rosacea and acne vulgaris, the ten- or twenty-per-cent. solution was of value. In furunculus it acted well in three cases when applied as a twenty-per-cent. plaster. In a fourth case it had no effect. It was of use in psoriasis, and also in a case of lupus erythematous. In favus it did no good. In twelve cases of eczema he found positively no beneficial effect—certainly a very damaging statement. On the other hand ZEISLER, in 56 cases of eczema, found that the drug produced excellent effects in 11 cases, good effects in 27, fair in 4, negative in 1, and unknown in 13. DR. ZEISLER says, however, that he used the ichthyol combined with zinc ointment as a base, the strength being from five to thirty per cent. This seriously vitiates the value of his conclusions as to its special potency. In 11 bad cases of sycosis, epilation was practiced; ichthyol soap and ten-per-cent. ichthyol ointment was used. The effects were excellent in 4, good in 7, cases. In acne vulgaris good results were only attained by its internal use. In acne rosacea the action was "remarkable" in two cases, and very satisfactory in five. Two chronic and very obstinate cases are reported by DR. ZEISLER, in which a ten-per-cent. ichthyol salve, sulphur-naphthol soap, and occasional mechanical treatment were resorted to. DR. ZEISLER seems to think that the drug has some effect in chronic rheumatism and dyspepsia.

Ichthyol mixes with all the ointment bases, and may be made up with vaseline, cold-cream, zinc ointment, etc. It is also used in watery solution, and as a paste, or a soap. It is given internally in capsules of one or two grains, of which from three to ten may be taken daily. It does not disturb the stomach. It has a strong, peculiar odor, and leaves a brownish discoloration of the skin, which soon disappears. UNNA believes that it is a strong reducing agent, drawing oxygen from the tissues. It is spoken of as having a regenerative effect in small, and a resolving action in larger, doses: it causes the blood-vessels to contract, and so possesses an astringent property.

It will be seen that the indications for the use of ichthyol are still somewhat indefinite. But while it apparently possesses no wonderful specific properties in any direction, it may be found to be worthy of a place in therapeutics. —*Med. Record*. Feb. 5, 1887.

TWENTY CASES OF ALEXANDER ADAMS' OPERATION.—DR. W. GARDNER, in the Australian Medical Journal, October 15, 1886, publishes a series of twenty cases in which he performed the operation for shortening of the round ligaments. In no case did the operation result in death. The first case operated on was a complete failure, owing to imperfect performance of the operation, due to want of knowledge. Of the rest, one has been found to continue well three years after operation, two for a peri-

od of two years, seven for a period of one year, nine for a less period than one year. Four of them have been delivered of living children at full time. His method of operating and after-treatment is as follows: He draws out the ligaments from four to six inches, and always ties them together over a large pad of gauze. He also sews them carefully to the margins of the ring and the skin. He uses very little sedative, and gives only ice to suck for the first twenty-four hours. Urine is allowed to be passed spontaneously to avoid the risk of cystitis. The first change of dressing is generally made on the seventh day; up to this time Lister's gauze is used, and afterward iodoform and salicylic wool. The patient is allowed to get up and sit in a chair, or recline on a sofa, at the end of the third week, and is encouraged to walk after the fourth week has passed. No pessary or artificial support is used. He is inclined to believe that the operation will be found most beneficial in cases of chronic retroflexion, with prolapse of one or both ovaries. It must also act beneficially by restoring the circulation in the broad ligaments to the normal condition. In anteflexion also it may be beneficial by straightening the uterus, and in prolapse also it will be of advantage, in cases which have resisted other methods of treatment. He inclines very strongly to the belief that displacements of the uterus are of no importance in themselves, and that they only give rise to trouble through the alterations they sometimes cause in the circulation through the broad ligaments. Therefore he does not operate because of the flexion, but only in cases where the flexion has caused alterations, probably in the circulation, evidenced by ovarian pain and reflex nervous manifestations.

INHALATIONS OF COLD AIR IN TYPHOID FEVER.—Cold air has been used to a limited extent for the reduction of elevated temperatures, but it has not found much favor among therapeutists, and has never attained the position among antipyretic agents that cold water has assumed. Yet, if we may rely upon some experiments made by DR. SOKOLOFF, related in the Journal de Médecine de Paris, this would seem to be a remedy of no little power in depressing an abnormally high body temperature.

DR. SOKOLOFF noticed that patients with typhoid fever who were treated in hospital tents during a season when the temperature at night would fall nearly to the freezing point were almost apyretic in the morning, although in the evening they might have a temperature of 104° F., or over. This observation led him to institute a number of experiments to determine the effects of the inhalation of cold air in fevers. He used the inhaling apparatus of NIEMEYER, and gave three inhalations a day, of from five to thirty minutes' duration. The temperature of the inspired air varied from 16.5° F. to 26.5° F. Thirty-three patients with typhoid fever were subjected to these experiments, and from the results observed the author came to the following conclusions:

1. Inhalations of cold air cause a reduction of temperature, less marked, however, and less constant, than that obtained by baths of cold water, or even of cold air. The antipyretic effect varies according to certain conditions—(*a*) The time of day: the most marked depression of temperature was obtained when the inhalations were given in the early evening. (*b*) The stage of the disease: the most notable results were obtained after the second week, the fever at this time being often reduced 2° F., and remaining low for several hours. (*c*) The duration of the inhalation is not of much importance, though the best effects were generally observed when this had been prolonged over a period of about fifteen minutes. (*d*) The temperature of the inspired air: the most notable results were obtained when this was between 16° F. and 20° F. (*e*) The moral condition of the patient: in states of great mental depression or excitement the antipyretic action was much less marked.

2. Inhalations of cold air cause a reduction in the number of respirations of about four in the minute, and in the cardiac pulsations of about six.

3. They diminish the unnatural dryness of the skin and mucous membranes.

4. They exert a favorable influence upon the bronchitis which so often complicates typhoid fever, and cause a more rapid exchange of gases in the lungs.

5. In consequence of this, they lead to an improvement in the general condition of the patient, and produce sleep.

6. The inhalations act as antiphlogistics upon the inflamed respiratory passages, and may be used with advantage in the treatment of chronic bronchitis, asthma, and emphysema.

The use of cold air as a therapeutic agent has been tried by SENATOR, NIEMEYER, ROSENTHAL, and others. TRAUBENBERG has made a number of experiments with cold-air baths, but considers them as inferior in value to baths of cold water. SOKOLOFF, in his experiments, never saw collapse induced, nor were there any other complications which could justly be attributed to the inhalations. The method, were it found to be really efficacious, would commend itself by its ready applicability, in winter at least, since air of the required temperature could at once be obtained from without, and there would be no necessity for moving the patient from the bed to the bath and back again, with its attendant risks.

The plan of treating patients with typhus fever in tents or open barracks was at one time extensively employed in this city, with very good results. And whether the good effects observed were attributable to the fresh air and thorough ventilation, or to the cold inhalations incidentally administered, is a question which might suggest itself. The method is probably not devoid of danger, especially as regards congestion and inflammation of the bronchial mucous membrane, and experience only can show whether the risks would be counterbalanced by the beneficial results obtained.—*Med. Record.* Feb. 12, 1887.

NOCTURNAL COUGH IN CHILDREN.—Sharp paroxysms of cough, which sometimes suddenly attack children at night when they are apparently enjoying the most tranquil sleep, are believed to be due to the accumulation of salivary and mucous secretions of the mouth, originating from a stomatitis or gingivitis which is associated with dentition. As the patient lies in the horizontal position, the accumulating

ecretion tends to gravitate toward the epi-lottis, the arytenoids, and even to the pos-erior commissure of the larynx. Thus the rich eflex nervous supply of this region is excited, nd a cough, either convulsive or non-con-ulsive, is the result. During the day, when he child is in the horizontal position, the same onditions do not obtain. The same condition s to accumulation of secretions is seen in hronic and moist coryza. McCoy thinks that he paroxysmal cough in question is always the esult of nasal catarrh, and is due directly to n irritant action upon certain zones of mucous urface in the nasal fossa, which were described y Hack, Mackenzie, and others. According o McCoy's explanation, the vertical position nables the secretion to escape readily by the atural channels, while at night the dorsal ecubitus prevents such a course.—*The Archives f Pediatrics.*

The Treatment of Pleurisy in Children.—Dr. Wiederhofer has recently studied this subject, chiefly from a clinical standpoint. The following are the main points of his paper, as given by the Archives of Pediatrics: The younger the child the more difficult of diagnosis is pleurisy. The disease may be entirely overlooked without a very minute examination. After the exudate has formed the diagnosis is somewhat less difficult. Then the child breathes more superficially, there is a febrile movement and cough, which may last several days. The frequent and superficial respiration are the more important indications in making the diagnosis. If there is no exudation in the pleural cavity, the child will lie upon the diseased side. As to the physical signs, at first there is general bronchial respiration, gradually there is dulness on percussion and diminution of the respiratory murmur. Should the exudation be abundant the diagnosis may be readily made, but should it be limited to a small area at the base of the pleura the diagnosis will be difficult. The sensation which is yielded by percussion is believed to be of greater assistance in forming a diagnosis than the information which is obtained by auscultation. The prognosis of this disease among children is usually favorable. Thoracentesis will be necessary in case the exudation is not absorbed, and especially in cases in which it is so abundant as to occasion troublesome dyspnœa to the patient. Purulent accumulations rather than serous or sero-fibrinous ones cause trouble of this kind, and can usually be correctly diagnosticated in those cases in which an exudation persists longer than fifteen days, the temperature reaching 104° F., morning and evening, while the child steadily emaciates. The crucial test is, of course, an exploratory puncture. The treatment of purlent pleurisy by aspiration is not followed by the best results, for, in a few days, another deposit of pus has taken the place of the former one. The author believes that it is best treated upon the same principle which governs the treatment of abscesses. An incision, sufficiently large, is made between the fifth and sixth ribs, the pus is evacuated, a drainage-tube is introduced, and an antiseptic dressing applied. The patient is usually cured in from two to three weeks. Should the operation be deferred until an advanced period of the disease the pleural cavity must be washed out systematically with a solution of salicylate of soda or of thymol. Phenic acid solutions are dangerous, and numerous cases of poisoning have followed their use. Unless the operation is performed early the will be deformity of the thorax. If the purulent deposit is left to itself it may point somewhere upon the abdominal or thoracic wall, and will be relieved by swelling, fluctuation, and inflammatory œdema. In most cases of this character there is a fatal issue.—*Med. Record*, Feb. 12, 1887.

A Simple Method of Extirpating Sebaceus Tumors.—Dr. C. Lauenstein, of Hamburg, describes as follows a simple method for removing sebaceous tumors:

After the skin about the tumor has been cleaned and shaved, I make, for example, on the occiput, at the lowest point of the base of the tumor, where the skin and the capsule are separated, a radical cut from one to one-and-a-half centimeters in length, through the skin. Through this slit I insert the small handle of the knife employed, or some other similar instrument, between the skin and the sac, which is done with a facility proportioned to the size of the tumor. I then make a number of advancing right and left movements with the handle, and easily separate the skin and sac from one another in this way.

The elasticity of the atheromatous tumor renders it easy, in a few seconds, to separate almost the entire circumference. The skin is next cut through with the scissors, from the slit upward, and the tumor completely turned out. It remains then to attend to stitching and drainage.—*Deutsche Med. Zeitung: Amer. Prac. and News*, Feb. 8, 1887.

Dangers of Administration of Ether in Nephritis.—Dr. Thomas Addis Emmet, in a recent communication to the Medical Record, says:

A recent issue of your journal contains an article by Dr. Henry B. Millard—on "The Dangers of the Administration of Ether in Bright's Disease." As the author has made some effort to present the literature on the subject, I beg to offer an important contribution.

During the winter of 1865-66, I lost a patient from uræmic poisoning a few hours after closing a laceration of the perineum, and in a subject otherwise in perfect health apparently.

This case drew my attention to the danger attending the administration of ether with any existing disease of the kidneys. It was reported to the Obstetrical Society; other cases have been given from time to time, and published in the different medical journals. Very little has been written on the subject, but I have had credit for the original investigation.

At the annual meeting of the State Medical Society, February, 1872, I read a paper on "Chronic Cystitis in the Female," which was reported in the medical journals of the city, and was afterwards published at length in the American Practitioner for February, and in the "Transactions of the State Medical Society" for that year. I there state—"To the effects of the anæsthetic I attribute the chief danger attending the operation in the advanced stage of

the disease, while from the irritability of the bladder its use is indispensable. As the kidneys are barely able to perform their function sufficiently well to preserve life, the balance is easily lost in the attempt at elimination, and death from uræmia rapidly takes place."

During my service as "Surgeon in Chief" of the Woman's Hospital, it was a standing rule, which I endeavored to enforce, that in every instance the condition of the kidneys should be carefully investigated before the administration of an anæsthetic.

In the first and in the subsequent editions of my work on "The Principles and Practice of Gynæcology," this subject will be found treated of, and in the Index under the head—"Ether, danger of, in cystitis with renal disease."

THE TREATMENT OF ASTHMA.—At the close of an exhaustive address on the above subject, delivered before the Medical Society of Berlin, on the 8th inst., the speaker, HERR LAZARUS, sums up as follows:

1. The prophylaxis of bronchial asthma demands inquiry into the constitutional and inherited tendency, and especially into the disease of the respiratory surfaces of the nose, throat, and lungs.

2. The asthmatic attack itself is to be cut short as quickly as possible. Potassium iodide and chloral in equal parts in large doses once or twice a day, act with the greatest certainty. In special cases operative treatment of nose and throat are to be recommended.

3. The treatment of the resulting condition is important. In general the most effective agent is the pneumatic cabinet, or potassium iodide, or terpine hydrate.—*Med. Press and Circular*, Feb. 2, 1887.

TWO NEW REMEDIES FOR ULCERS.—The well-established hemostatic action of solutions of antipyrin prompted DR. BOSSE (Berliner Klinische Wochenschrift, 33, 1886) to employ it in a case of varicose ulcer, in which a profuse hemorrhage occurred from an arroded vein. He dusted the surface freely with antipyrin, and put on a compress of absorbent cotton and a bandage. After three days the dressing was changed, and the whole ulceration was found to be covered with healthy granulations. He therefore continued to apply the antipyrin for ten successive days, and thereupon dressed the granulations with a 2-per-cent. ointment of nitrate of silver. The result was that the ulcer, which was as large as the palm of the hand, was healed in about three weeks. Thirty similar cases were treated with equal success. BOSSE, therefore, recommends antipyrin as promoting the development of granulations in atonic ulcers and fistulæ. According to MARTIN, suppositories composed of cocoa-butter and ten grains of antipyrin afford great relief in hemorrhoids and fissured anus, and may cure. DR. A. SYDNEY REYNOLDS, in the Medical News, gives the result of his experience with sub-iodide of bismuth in the treatment of ulceration. Its therapeutic and physical properties may be summed up as follows: (*a*) It subdues the inflammatory process. (*b*) It substitutes the inflammatory regeneration of tissue with neoplastic force, which closely simulates normal embryonic histo-genesis. (*c*) It is, by its action, a *vital aseptic*. (*d*) It prevents the formation of pus. (*e*) It lessens direct and reflex irritability. (*f*) It is so bland and unirritating that it can be used on any surface. The sub-iodide of bismuth, by virtue of these properties, is almost a specific for ulceration.—*Medical Record*, Feb. 5, 1887.

THE BINIODIDE OF MERCURY AS AN EMMENAGOGUE.—I find the red iodide of mercury is a certain and safe emmenagogue. My attention was directed to its virtues quite accidentally some three or four years ago, since which time I have used it successfully in a large number of cases. I prescribed it in the form of a mixture as follows; but I should think it would act quite as effectually in pills of a quarter of a grain twice a day, or an eighth four times a day:

℞ Sol. hydrarg. bichlor., ℥ i.
Potass. iodid., ʒ ss.
Ferri ammon. citrat., ʒ i.
Ether. chlorici, ʒ ij.
Aquam ad ℥ viii.

One teaspoonful three times a day after meals.

—C. R. ILLINGWORTH, M. D., in *The Lancet*, Jan. 29, 1887.

A NEW HYPNOTIC.—DR. GHILLANY, pharmacologist to the Vienna General Hospital, has succeeded in preparing an alcoholic extract from the roots of piper methysticum (kava-kava), which is called "extractum kava depuratum." Experiments made with this drug by some physicians of the hospital proved it to be a valuable hypnotic. In all the cases where it was administered sleep was produced, without any disagreeable consequence; even headache, following generally the exhibition of hypnotics, did not occur. It was given, as a powder, from 2 to 5 centigrammes being a dose; or as a suppository containing 2 centigrammes. —*Med. and Surg. Reporter*, Feb. 5, 1887.

DR. METCALF ON THE TREATMENT OF SCIATICA.—DR. METCALF, writes to the Boston Medical and Surgical Journal, that no prescription for sciatica has ever equalled in efficacy the following: ℞ Tinct. aconit. rad., tinct. colchic. sem., tinct. belladonna, ää ʒ j. M. Sig.: Dose six drops every six hours. He also uses triturate tablets, each containing three drops of the following: Tincture of aconite-root, tincture of seeds of colchicum, tincture of belladonna, tincture of actea racemosa—equal parts by volume. Dose, one every four or eight hours.

EMMENAGOGUE ACTION OF OXALIC ACID.—DR. POULET (Gazette Hebdomadaire, 1886, No. 20) extols oxalic acid as the best of all emmenagogues. It does not, however, he admits, abolish the pain experienced by many women in the discharge of the menstrual function, and it is, of course, inoperative in amenorrhœa consequent upon organic disease. The dose in which he prescribes it is one teaspoonful every hour, of a mixture containing thirty grains of oxalic acid, about six ounces of water, and two ounces of syrup of orange-peel.

The Medical Age.

Vol. V. DETROIT, MAR. 10, 1887. No. 5.

Original Articles.

SOME IRREGULAR CASES OF DIPHTHERIA.*

BY W. H. ROUSE, M. D., PH. C., DETROIT, MICH.

So much has been said and written in regard to diphtheria during many years, and especially during the last five, that it is with more than ordinary diffidence again presented for the careful consideration and thoughtful discussion of this scientific society. Any ailment, having a mortality of over 25 per cent. as statistics show is the case with this disease, should never be unworthy of reinvestigation by scientists, physicians, and sanitarians.

This subject is introduced, not so much for the discussion of the cause, nature, treatment, etc., of this ailment, as to call attention to peculiarities observed in certain cases of this disease.

In a good brick house on one of our avenues lives a family consisting of a man and his wife, a daughter and son, and a maid servant, all of whom usually enjoy good health. In this family:

Case I. The girl suffered from malaise, myalgia, alternate chills and fever, sore throat, swelled cervical glands and other usual symptoms of diphtheria, in a mild form, continuing about one week before seen. When seen there was a patch of exudate of considerable size on each tonsil, presenting the usual appearance of diphtheria. The parents say there was a rash resembling scarlatina during the fore part of the week. This the girl denies and the most careful examination failed to detect either rash or desquamation. If a scarlatinal rash had been present, the accompanying dermatitis must have been very slight to leave no obvious traces in desquamation.

Case II. A few days after the onset of Case I, the wife suffered in a similar manner, but much less, and with no rash. At the time of visit, her tonsils were inflamed but no diphtheritic membrane could be detected.

Case III. About one week from the commencement of Case I, the daughter, aged eight years, past, having suffered from malaise for a day or two, ate a rather hearty breakfast, and soon after complained of a severe headache, nausea with occasional vomiting, hot and cold sensations frequently recurring, aching and soreness of the limbs, sore throat, etc. These symptoms becoming worse she was seen in the evening, when the features presented a remarkably pinched appearance and the prostration was very marked. The fever was intense, but as nausea came on perspiration would appear. The hot and cold sensations and soreness of the muscles were very marked. The tongue was very dry and quite suggestive of enteric fever. The bowels were slightly relaxed and showed considerable tenderness, especially on the right side. The cervical glands were swollen, and both tonsils were nearly covered with a dusky white exudate. The posterior nares were partially closed.

On the next day, about 36 hours after the active onset of the disease, an erythematous rash appeared and gradually extended over the entire body. This rash, which was quite intense, and typical of scarlet fever, continued about a week, and was followed by free desquamation.

The fever though of a typhoid character, was high, the temperature ranging from 100° Fah. to 105° Fah., with afternoon and night exacerblations, more or less marked, continued about three weeks and then gradually subsided. This fever did not seem to be materially influenced by the presence or absence of the rash.

The tongue was red, dry, and swollen during the fever, and on one day was observed to protrude towards the right side.

The exudate on the tonsils had nearly disappeared on the fifth day but the posterior nares remained bad and the exudate on the tonsils became worse during the second week. At times there were discharges of bloody matter from the nostrils, and slight hæmorrhage, such as might occur from ulceration.

The stomach was remarkably irritable during the febrile stage—three weeks—food and medicine being retained with considerable difficulty.

The bowels remained quite relaxed for a little over two weeks when, they became natural and then slightly constipated. The tenderness of the bowels corresponded with the intensity of the fever and subsided with it, at about the end of the third week.

The urine was high colored, and often deposited a little sediment. It contained no albumin till the third week, when for a few days it was rather free, amounting to about three

* Read before the Wayne County Medical Society, February 17, 1887.

fourths of the bulk of urine tested. While albumin continued free slight œdema of the face was noticeable. This was the only symptom of dropsy, and the protruding of the tongue to the right one day and a continued dragging, very slight, of the right foot since recovery, were the only symptoms of paralysis.

Delirium resembling that observed in typhoid fever was more or less marked during the greater portion of the febrile stage, and a portion of the time it was quite pronounced.

Drs. Wyman and Post kindly assisted in conducting this case to a favorable termination.

The son younger than the daughter was sent from home and no other case has occurred in this family.

The servant girl cannot tell whether she had scarlatina before this time. The wife, Case II, had scarlatina when a girl, but the children had not.

In this case the question of the real nature of the disease or diseases naturally arises. Did this girl have, diphtheria only; diphtheria and scarlatina, diphtheria, scarlatina and enteric fever, scarlatina alone, or scarlatina and enteric fever? The similarity in many respects of diphtheria and scarlatina may account for some at least, of the symptoms observed in this case either being the disease, and it is quite possible for both diseases to co exist. The severity of the onset of the disease may account for some but not all of the symptoms of typhoid fever.

After carefully watching the case to a favorable termination, it is believed all the symptoms observed were due to diphtheria.

Diphtheria exudates though most frequently observed on the tonsils may appear in many other localities, as the stomach, bowels, on external parts, etc. When disease affects the bowels the symptoms may simulate typhoid fever as in the following:

Cases IV and V. In a family of six children, three suffered from well defined diphtheria of a little above the average grade of severity, one was not sick, and two, both boys, had the early symptoms of diphtheria well marked, except exudate on tonsils and vicinity. In these two cases with the malaise, chills and fever, appeared tenderness of the bowels, most marked in the vicinity of the ileo-cæcal valve, with some diarrhœa. The fever in each case continued about three weeks, and the temperature ranging from 100° Fah. to 104° Fah. The tongue was dry, the bowels usually quite relaxed, and the passages quite offensive. For a considerable portion of the febrile stage delirium was quite marked. With the exception of the rash and the exudate on the tonsils and in the posterior nares observed in Case III, the symptoms in the three cases were remarkably similar throughout their entire courses. These two cases which bore a remarkable resemblance to typhoid fever, were regarded as diphtheria, the colon instead of the tonsils being the chief seat of exudate. These cases occurred in winter while diphtheria was quite prevalent, and the boys were aged 5 and 7 years respectively.

An erythematous rash is not unusual with diphtheria and other acute diseases, and some individuals are remarkably susceptible, slight indigestion or even certain articles of food being sufficient to induce a free eruption. These rashes may vary in appearance as erythema, roseola, urticaria, etc., in duration from a mere transient efflorescence to one or more weeks, and in intensity from that which is scarcely noticeable to a dermatitis followed by free desquamation, the freeness of desquamation in these cases as in scarlatina depending upon the intensity of the dermatitis and not upon the nature of the ailment with which it is associated A rash occasionally appears with diphtheria bearing a striking resemblance to that observed in scarlatina, even to the minute papulæ regarded by many as characteristic of scarlatinal eruption, as shown by

Case VI. A man aged about 38, years having a wife and three children, had scarlatina some years before. His children, who never had scarlatina, were frequently in the room with him but contracted no ailment. No history of exposure to diphtheria or scarlatina was obtainable. This man had malaise, myalgia, nausea, chills and fever frequently recurring, soreness of the throat, swelling of the cervical glands, etc. The tonsils when seen, about 18 hours after onset of disease, were nearly covered with diphtheritic exudate, and the nostrils were somewhat involved. About 12 hours after this a rash appeared and gradually extended over the entire person. This case which was quite typical of scarlatina, continued ten days, and was followed by very free desquamation, albuminuria and recovery. There was in this case, in all probability, no scarlet fever as the patient had previously suffered from it, and those who should be susceptible did not contract the disease being freely exposed.

One attack of scarlatina or other so-called non-recurrent disease, is not in all cases a guarantee against a second, third, or even a fourth attack, but such recurrent cases are not very common, and when they do occur the interval is usually one or more years and the reports of previous attacks are very often through non-professional sources, which are not always reliable. Neither is it claimed that a given contagious or infectious disease did not exist, because those who should be susceptible did not contract the ailment, being freely exposed; for instances are not unusual in which one, in a family of several children, suffers from such a disease, without transmitting it to any person so far as known.

Case VII. A usually very healthy girl, aged

14 years—the only child in the family—after experiencing the usual preliminary symptoms of diphtheria about 24 hours, was covered with a typical scarlatinal rash which continued six days, ending in free desquamation. In this case an exudate appeared in the posterior nares but not on the tonsils. She had not had scarlatina, but may have been exposed to it, as several cases existed near the school she attended. She made a good recovery but in about five weeks thereafter she was again attacked and passed through an ailment precisely similar to the first. In this case the rash was probably due to diphtheria, the exudate being confined to the nares and the ailment not being thoroughly eradicated, returned with its former symptoms.

Case VIII.—Soon after seeing Case VII a very similar one appeared in a rather delicate boy, aged seven years. This boy attended the same school; the rash and desquamation were not quite so free; a diphtheritic exudate appeared on the tonsils and in the nostrils, and the disease occurred three times at intervals of about five weeks. Albuminuria was present during each attack, but there were no indications of paralysis or of dropsy.

Case IX.—In a family of three children; was seen with Dr. Dakin. The eldest, a girl of 5 or 6 years, presented a well-developed rash, typical of scarlatina. She also had diphtheritic patches of some size on each tonsil, and swollen cervical glands. The water was rather dark and scant, but was not tested for albumin. This being the third similar attack within six months, each being followed by free desquamation, but neither paralysis nor dropsy, the term scarlatina was becoming rather monotonous and some other term for the disease was desirable.

Dr. R. A. Jamieson, who states he has seen a number of cases of recurrent rashes, kindly furnishes the following interesting notes.

On Feb. 17th, 1884, Mary H., aged 23, was taken ill and presented the following symptoms: Headache, considerable pain in lumbar region, persistent vomiting, relaxed bowels, slightly sore throat, temperature 104° F., pulse 110, some degree of delirium when sleeping, complete anorexia but considerable thirst, face and entire surface of the body covered by diffused flush, the case presenting most positively all the characteristics of scarlatina.

The history of the case revealed the fact that my patient had had measles, scarlet fever, small-pox, and all diseases incident to childhood. These were, therefore, excluded in attempting to arrive at a diagnosis of the case.

The second day fever and all other symptoms continued except the condition of the skin, which now appeared swollen, very sensitive, intensely red, and more or less covered by a vesicular eruption.

On the third day: Fever somewhat less, vomiting controlled by ice; headache and backache not severe, and for the following four or five days these symptoms gradually lessened, and the patient being able to take milk was nourished comparatively well on this diet. Complete desquamation of the epidermis took place, the hair and nails falling off.

Four weeks after the first attack there was a recurrence of the same symptoms, followed by just as complete desquamation as before. A year ago the young lady suffered a third attack, more aggravated than either of the former, the physician treating the case in this last attack pronouncing the disease scarlet fever.

A rash with diphtheria does not appear to increase the gravity of the ailment. All the patients hitherto observed have recovered, but as in scarlatina they require especial care during and after desquamation, to guard against renal trouble.

In cases VI to IX inclusive, as in case III, the question of the presence of scarlatina may justly be suggested, for they all bore a remarkable resemblance to each other. A previous attack of scarlatina in case VI, and the repetition of the ailment at short intervals in VII, VIII and IX, renders the presence of scarlet fever very improbable, and very few physicians would crave the notoriety they might obtain by a scarlet fever card being placed on a house every month or two, by their orders, for the same individual.

The diagnosis of such cases as these is attended with considerable difficulty, especially if the pre-eruptive stage has not been carefully observed. It will be observed in all these cases that malaise, myalgia, and especially hot and cold sensations, or rather rapid succession, were very prominent pre-eruptive symptoms. These symptoms may, and often do, exist in the early stage of scarlet fever, but seldom in so marked a degree, especially the chills and fever. In scarlatina the chills, if present, soon subside, and a fever of a high grade, modified somewhat by the nausea usually present, comes on, and continues till the eruption appears and then subsides with the rash, unless modified by some complication. The presence of the exudate on the tonsils or elsewhere in the early stage, is often of value in determining the nature of the ailment, and the general appearance of the patient—the haggard or flushed countenance—may often lead to an accurate diagnosis. Known exposure to either ailment may be of some service, but when it is considered that very many cases of both diphtheria and of scarlatina, which occur in cities, at least, can not be traced to obvious sources of contagion, the value of this means of diagnosis is not great.

In cases in which both ailments co-exist, as they probably do at times, and the diphtheritic

symptoms are most prominent during the pre-eruptive stage, the diagnosis is liable to be problematic in regard to the presence of scarlatina.

The treatment in these cases need not vary materially from those without a rash, except inunctions to relieve the intense itching usually present, and avoidance of cold to the delicate surface which results from the free desquamation.

A PLEA FOR LEGAL RECOGNITION.*

BY H. B. GIBBON, M. D., TIFFIN, OHIO.

I presume few of us have paused and cast away the busy cares of a physician to consider the few rights and privileges we can claim as a a special act of honor or respect, which justly belongs to one who sacrifices home comfort, family enjoyments and society pleasures, as does the busy practitioner in this country. Long rides in the bitter cold, anxious watching at the bedside, sleepless nights and troubled days, hurrying him over life's summit in manhood, and sprinkling the silver locks of age among the golden ones of youth. It is sad, indeed, to think that a profession, whose mission is so noble and purposes so commendable, and whose sphere is second to none, should have so few rights and assume so many responsibilities. If we pause to consider our relation to the public on the one hand, and to the law on the other, if we take a comprehensive view of these facts, we are not highly elated over the pleasurable position. May I ask what rights and privileges we, as physicians, have? Is there anything that we can claim, as an incentive to make ourselves competent, save self-pride and the spirit of rivalry among ourselves?

Can you place your finger upon any article that will bear a construction which recognizes the physician as worthy of any consideration beyond that accorded unskilled labor, in right at law? Has legislation ever recognized the petitions of the profession with reference to any protective measures they have prayed for? Does any physician put his head above the common opinion of a doctor's prescribed sphere, and dare claim, for humanity's sake, protection and "equal rights" to those accorded to other professions in rank inferior, object beneath, and in results not to be compared with those of the true physician?

Let us see how we stand, compared with other professions. What does the law prescribe for us? It prescribes a fee for post-mortem examination, at the instance of the coroner. And the Ohio statute also provides, that he shall be allowed such fee as the court in said county (in which the post mortem has been made) may direct, *as it in its judgment sees proper*, which is usually a little more than the coroner's fees, also prescribed by law (sec. 1339, Ohio statute), while the physician is liable to be called, and held by the court (if trial supervene), at the rate of one dollar per day, as a witness. The coroner is usually a man with only ordinary ability, and the physician is placed upon his level, with all his acquired knowledge, and doing a work which only such knowledge can accomplish. Besides, our prospect of being called into court, at our inconvenience, for the paltry sum of $1.00 a day, to be subjected to the pestering of a merciless attorney, a relentless judge and an incompetent jury to decide upon our testimony. The fee of the attorney whom we serve, is from $25 to $50 for prosecuting or defending a criminal, the jury (usually professional) receive $2 a day for their ability to pass upon testimony, after they have heard it with the argument by the attorneys, and the charge from the bench, as to the application of the law to the findings in the case; while the physician with his skill, experience, time and merchandise, is called into court to testify, not as to the facts in the case as a witness giving direct testimony, but as an expert witness, for the sum of $1 per day, with a penalty of five to fifty dollars hanging over him, or the door of a cell ajar to welcome him, at the discretion of the court, for non compliance with the directions of his subpœna.

The Ohio statutes provide for payments for services rendered to the poor according to the judgment of the trustees, as to the value of such services. But in order that he may collect any fee, the attending physician must notify the trustees, or one of them, in writing, within (3) three days from the time of his first visit. If such notice be not given within the first three days, the township shall be responsible only for the services rendered subsequent to such notice.

The law provides that certain conditions must be complied with before entering upon the practice of medicine, the fulfilment of which conditions costs us from $500 to $3,000, while the qualifications of a juror, who gets twice as much per day for his services, is of no consequence, even when it comes to the decision of the question of depriving a man of life and liberty; and, until recently, ignorance was almost a necessity on the part of a competent juror.

Our statutes provide that a physician shall not be compelled ro reveal any information he may gain from a patient in his capacity as a physician, nor his instructions to a patient in the same capacity. It also exempts from execution certain articles, to the amount of $100. They are also interested in a temperance work among the physicians, for they provide that a physician shall not prescribe for a patient whilst intoxicated, under a penalty of fine and imprison-

*Read before the North Central Ohio Medical Society.

ment. The statutes also provide for the sale or recommendation of secret medicines or remedies the same punishment. Yet day after day our druggists and traveling pretenders impose upon the public secret nostrums, without fear of consequences. Yet there is a law, with penalty attached for its violation, for practicing or attempting to practice medicine or surgery without certain qualifications, before referred to; still there is not a day passes but that our drug-clerks and pharmacists prescribe and recommend certain secret remedies for the afflicted and frequently they guarantee cures. We physicians are well provided for, like the thief and highwayman, plenty of law and well modified by passing through certain mediums, so that when it reaches us, it does not amount to much. Organizations have protective laws, but we fail to find a single section as a protective instrument to us as benefactors, rather than nuisances, either public or private. Is there anything we can do to secure our rights? Should we not continue the effort to make the people, at least the legal profession, recognize the injustice that exists in this state of affairs, and pray that we have some source for redress? The Legislature has turned a deaf ear to every measure that has been suggested, and consider same as being narrow in scope, and, I presume, desperately wicked, so that all have failed to be entertained for a sufficient time to have a fair consideration of their import or merits. The courts appear to have lost their finer respect for us as a profession, and have concluded to leave us to the powers that be. The attorneys seem to find some satisfaction in goading us with the fact that we have no knowledge, however dearly gained, that is not subject to the rulings of the court, and that they can demand it in the form of a polite request, and we dare not say no. Can any man tell where we stand, and whether we have any rights at all? It appears that we are in the scale, in legal favor, below the tramp; and arraigned desperado, for the law provides for his defense, and the legal fraternity calls in the medical profession to either find him guilty or establish his innocence. The attorneys are well paid, and they compel us to serve them by using our merchandise to attain their ends.

SCARLET FEVER VERSUS RŒTHELN.

BY JOHN P. CORCORAN, M. D., DETROIT, MICH.

Authorities on the subject tell us that scarlatina is a contagious affection, characterized primarily, by general febrile symptoms and sore throat, and, secondarily, by the appearance, on or about the second day, of a scarlet cutaneous eruption, followed by desquamation, which is usually in proportion to the intensity and diffusion of the efflorescence, the cuticle being exfoliated either in the form of minute branny scales, or in pieces of epidermis of greater or less size. Scarlatina is by many writers subdivided into three varieties S. simplex, S. anginosa, and S. maligna, and varies very much in its intensity, "in very mild cases the symtoms (Flint) are so slight that the patient does not take to the bed." NELIGAN gives a variety which he terms S. sine exanthemate, and which he says is simply a mild form of sore throat with febrile symptoms, but without the characteristic eruption of the typical forms, but with the power of communicating the typical disease to the unprotected. Scarlatina has also for a characteristic the red and white tongue, usually known as strawberry tongue. This, too, is a symptom in which "doctors disagree." ELLIS, on diseases of children, says "the papillæ of the tongue are elevated and project as bright red points through the white mucus on the surface, producing the well-known white and red strawberry tongue." FLINT has it: "In the progress of the disease, the coating exfoliates leaving the surface of the tongue clean and reddened; and, the papillæ being enlarged, the appearance is strikingly like a ripe strawberry." The duration of the stage of eruptions is from 4 to 6 days, occasionally being prolonged to 8 or 10 days and sometimes being continued for a longer period. In irregular cases of the disease "the only local manifestation of the disease may be a slight soreness of the throat; in cutaneous eruption taking place, per contra we may have a slight cutaneous eruption without any sore throat, and again we may have an attack of scarlet fever giving rise to acute albuminuria without any febrile movement or cutaneous affection."

FLINT dismisses "false measles" in very short order by saying that it is of no importance that it has no sequela or complications, that it lasts from 24 to 48 hours, when it disappears without desquamation and that it does not commence on the head and spread downward like measles but that it appears on different parts of the body at once, and that it does not call for treatment and also that the affection of the throat, of scarlatina, and the catarrhal symptoms of measles, are entirely wanting in roseola or false measles.

NELIGAN dignifies it with the name of "bastard measles" and says very little else about it.

PROF. HENNOCH of Berlin says of rœtheln; "While some physicians regard it as an independent disease characterized by a scarcely perceptible fever, occasionally by mild catarrhal symptoms, their opponents maintain that these cases are nothing more than mild cases of scarlatina or measles, my own experience does not justify me in giving an opinion concerning this question."

ELLIS, on diseases of children, says also of rubeola notha, or rœtheln: it partakes in a

measure of the characters of both measles and scarlet fever, the rash which resembles measles being of very short duration, catarrhal symptoms being slight or absent, temperature never exceeding 100° F., sometimes ranging 97° to 99° F. Tongue not usually furred and presents no strawberry appearance, no complications and no sequela.

My own experience with the disease known as rœtheln or "Dutch measles" is as follows: Was called to see the two year old child of a family residing on Crawford st. this city, and found the patient (who only commenced to show illness the day previous) covered with a bright, red-pointed eruption; some vomiting; temperature 102°, patient restless and irritable. Constipation existing, I prescribed Sal Rochelle and awaited results. In a day or two later the rash and fever had almost disappeared, and still later was followed by slight desquamation.

A day or two after my being called to see the first patient, another child was taken down with same symptoms as the first, and this was followed by two other children; lastly, the fifth child, a bright boy of six, was taken with the disease which rapidly proclaimed itself scarlatina, nearly approaching to scarlatina maligna, the throat symptoms being unusually severe, almost approaching diphtheria; very high temperature (105° to 106° F.) and in the decline of the throat symptoms, paresis of the lower extremities and a complete peeling off of the epidermis of the hands and feet.

The moral of all this is, if you have a mild case of scarlatina call it "Dutch measles" or rœtheln, and if you have a very severe case of rœtheln call it scarlatina, but in every case look for albuminuria.

191 Piquette Avenue.

PHYTOLACCA DECANDRA.

BY J. D. ELY, M. D., MEDINA, MICH.

In the issue of the MEDICAL AGE of Oct. 11, I recommended phytolacca in the treatment of bronchocele and reported a case illustrating its use.

In the issue of Nov. 7, DR. BUXTON, of Fulton, Iowa, questions the value of phytolacca and essays to detract from it by ascribing the cure of the case principally to the tonic, dialyzed iron, prescribed in connection with it.

Permit me to reply briefly, and to again attest my confidence in phytolacca, as well as offer additional evidence of its value. The fact that DR. BUXTON acknowledges that he has never had any personal experience with phytolacca should be enough to make his opinion of it count for little at this time. It is not in keeping with the progressive practitioner of to-day to taboo a remedy before subjecting it to a thorough trial in practice. I recognize and concede that dialyzed iron was a valuable adjuvant in the treatment of the case reported, yet I have no doubt that phytolacca was the main factor in bringing about the favorable result, as I have knowledge of cases of bronchocele cured with that agent alone, and have not such knowledge with regard to iron, or any other tonic agent, uncombined.

Give the phytolacca a fair trial and I am confident it, will prove all that Ihave claimed for it as a superior remedy for bronchocele.

There are few agents in the *materia medica* that I prescribe with more confidence, or that give more prompt and satisfactory evidence of therapeutical value. It has long been a favorite remedy for subduing inflammation and preventing suppuration of the mammary gland; and so certain in its effects that it has well earned the reputation of being a specific for that troublesome condition.

It is surprising how little of the remedy is generally sufficient. I commonly prescribe:

℞ Tinct. aconiti, rad. gtt. x.
Tinct. phytolaccæ decan. gtt. xx.
Aquæ ʒ iv.

M. Sig. One teaspoonful every hour, and have applied to the gland equal parts of tinct. phytolacca and water, every three hours.

Of three cases which occurred in my practice in 1885, where the gland suppurated during previous confinement and seemed likely to again, the above had to be duplicated for one only.

It is proper to state here that phytolacca has been tested singly, and proved its efficacy in many cases of this character.

Aconite, though not always a necessary part of the treatment, is useful in allaying the febrile excitement manifested.

A young man who suffered a metastasis of mumps to the testicles, was given prompt relief and cured with prescriptions not materially different from the above, in conjunction with a bean poultice. He is remembered as one of the most grateful and liberal-paying patients I ever treated.

A case of chronic follicular pharyngitis, of the *hypertrophic variety*, which came to me for treatment two years ago, was cured by daily applications, to the diseased surface, with a swab, of tinct. phytolacca two parts and water one part, the time required being about two weeks.

Other cases might be reported, but samples sufficient have been given to illustrate the good effects of phytolacca in my hands, and I trust to induce others to try it and report results.

In conclusion, I would repeat that a tincture from the fresh roots only should be used; that made from old, dry material is comparatively worthless.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, January 17, 1887.

The President, EDMUND J. DOERING, M. D., in the chair.

DR. LYMAN WARE read a paper entitled

A CLINICAL STUDY OF GLAUCOMA.

The author briefly referred to the history, pathology and etiology of glaucoma, and expressed his belief in the curative power of VON GRAEFE'S operation of iridectomy. Unmistakable symptoms of glaucoma are supraorbital and ciliary neuralgia, increased ocular tension, periodic diminution of vision, the appearance of a halo around artificial lights, a sluggish and widely-dilated pupil and a shallow anterior chamber. Although increased tension may be associated with other diseases of the eye, its presence should always lead to a critical examination. Several cases were detailed: MRS. M., aged 50, while riding in an open street-car, contracted a severe cold, which was followed by neuralgia over both eyes. The pain was so intense that at times she was delirious. Her weight was reduced from 110 to 80 pounds. She became entirely blind. On account of the eye being small and deeply set and the anterior chamber very shallow, sclerotomy was advised and performed. This gave immediate relief, but the pain returned again in a few days. When DR. WARE saw the case the anterior chamber was almost obliterated, the glaucomatous lens pressed the iris forward until it came in contact with the cornea. With a von Graefe cataract-knife a free sclero-corneal incision was made and a portion of the iris excised, and the lens removed from both eyes. The pain greatly subsided, but the sight was irrecoverably lost.

Another case was a man æt. 52 years, who complained of having had pain in and over the left eye for five or six months, and had seen the halo about street lights. On examination tension was found increased; vision diminished one-half. Some months later iridectomy was performed, and a solution of eserine (4 grs. to the ounce) instilled every four hours into the other eye. Pain was at once relieved and all symptoms of glaucoma rapidly disappeared.

MRS. M., aged 45, had frequent attacks of neuralgia and noticed defective vision in the left eye six months before coming under observation. Tension was found much increased; she had seen halo about artificial lights for eight or ten months. Distant objects could be clearly perceived by right eye. Iridectomy was performed on the left eye with a view of abating the pain and preserving the vision of the right eye. The relief from pain was great, vision of right eye fully restored and left eye much improved.

DR. E. E. HOLMES reported

A CASE OF FOREIGN BODY IN THE ANTERIOR CHAMBER:

This case was of special interest to me on account of the difficult diagnosis and the difficulty attending the removal of the foreign body. The doubt regarding the diagnosis arose from the fact that there was a small central perforation of the cornea. Below this, and not connected with it, was a fine, greyish line extending downward and inward (R. eye), apparently in the substance of the cornea, fairly into the angle of the iris and cornea. This resembled the channels left after the removal of fine slivers of grain stalk which are sometimes thrown into the cornea obliquely from threshing machines. The patient explained the accident as follows: He was setting a machine punch so the punch would accurately fit the die. The power was applied, when the punch did not accurately correspond to the die. At the same instant something entered the patient's eye. He came to my house twenty-four hours after the accident, with the eye slightly red, but not painful. I prescribed atropine and sent him to the hospital. The next morning the pupil was round and fully dilated. The media were all clear. I felt great anxiety in regard to the case, but inasmuch as during five days there were no symptoms of inflammation along the supposed track in the cornea, I finally became convinced that there was a fine splinter in the anterior chamber, in close contact with the cornea.

I made quite a long incision through the lower border of the cornea, the knife touching and moving the piece of steel. I endeavored by means of a fine forceps to seize the lower part of the steel and disengage the point from the tissues at the angle of the iris and cornea by carrying the steel farther towards the pupil. This was found to be impracticable, since the lower end of the piece was firmly held by the tissues. I used all the violence I considered warrantable. As the anterior chamber was without aqueous humor, there was some difficulty in further procedure without violence to the lens or iris. I consequently extended the wound in the cornea upward so the upper end would correspond with the upper end of the steel. This end was easily seized and with considerable force withdrawn. The splinter was three-sixteenths of an inch in length. Eserine at first, then atropine with antiseptic dressings were applied with great care. There was no reaction, the patient recovering perfect sight, except as far as there was dimness from the central cicatrix in the corner. Vision was good five weeks after the patient had returned home. I must confess the almost V-shaped incision in the lower border of the cornea did not please me.

DR. HOLMES also reported

A CASE OF INTRA-OCULAR TUMOR.

This tumor, filling the sclerotic, is a sarcoma of the choroid. The patient, a man 62 years of age, had been under the observation of several specialists during the past year, but could not give me a definite expression of their opinion. When he came to me, a few days ago, the cornea was perforated and presented a staphylomatous projection of the growth. For a year there has been pain and for the last six months very great pain. The tissues of the orbit around the globe were greatly swollen, but not indurated. In enucleating the eye I expected to find the sclerotic destroyed posteriorly and the orbital tissues invaded. The enucleation, however, was performed as easily as in ordinary cases. The optic nerve is seen to be enlarged several millimetres behind the sclerotic. The swelling in the orbit was caused by nodules of fat filled with numerous blood-vessels. DR. OCHSNER pronounces the tumor to be a small round-celled sarcoma with very little pigment. The nodules of fat are free from sarcoma cells. This class of tumors, if removed early, are not very liable to return in the orbit. They may, however, reappear, especially in the liver or other internal organs. They must, consequently, be regarded as quite malignant.

DR. BOERNE BETTMAN read a paper on the

CONNECTION BETWEEN OCULAR AND NASAL DISEASES.

The author thought that numerous pathological conditions of the eyes and lids are attributable to abnormal changes in the nose, and that in these cases treatment of the ocular organs alone will fail to alleviate the trouble. After referring to HACK'S monograph on the subject, DR BETTMAN detailed several cases in substantiation of his theory: A boy of ten applied for treatment of epiphora of both eyes. The eyes were constantly weeping. An examination of the nose revealed an extensive swelling of the anterior portion of both turbinated bones. When these parts were touched with the probe profuse lachrymation was induced, and a light thrown into the eye by means of the ophthalmoscope produced violent sneezing. A deep incision was made in the swelling with a knife electrode, and a flat burn was also employed. The slough was completely thrown off in fourteen days and the boy cured in one month, the eyes receiving no treatment. Polypi of the nose have been found to produce secondary affections of the eye: Hermann S. was prevented from following his trade of a cabinet maker, on account of the excessive flow of tears; he also complained of pain in the eyes. Polypi were removed from the middle turbinated bone with the Jarvis snare, and a cure effected. E. B., aged 16 was extremely sensitive to light and the eyes were both bathed in tears. Each time the eyes were exposed to a glare of light she sneezed violently. There was Hack's swelling in both nostrils. Two pledgets of cotton were soaked in a 5-per-cent. solution of cocaine and allowed to remain five minutes at a time. There was an immediate effect, and in three-quarters of an hour she was able to bear the light. The patient refused cauterization and employs cocaine to avert photophobia. The majority of cases coming under Dr. Bettman's observation have been treated by applications of the galvano-cautery to the nasal membrane. The applications restricted to the anterior end of the turbinated bone frequently fail to give relief. It has been found that a sensitive area exists at the posterior end of the inferior turbinated bone and also at the anterior part of the nasal cavity, in the angle forming the boundary of the vestibule. In conclusion, the author thought oculists should always subject the nose to a thorough examination when seeking the source of ocular complaints.

DR. H. M. STARKEY read a paper entitled

SOME MODIFICATIONS IN THE TREATMENT OF STRICTURE OF THE NASAL DUCT.

The author said that about 1883 the Western Repository Co made a lachrymal bougie of medicated gelatine of such elasticity that it could easily be passed into the nasal duct. It was less painful than a metal probe, and its slow solubility kept the mucous membrane at the point of structure distended so that it could be acted upon by the medicine from thirty to sixty minutes. He thought results showed the use of electrolysis in these cases to be often unsatisfactory. The object to be attained is to restore the diseased parts to as nearly a normal condition as possible, and the most satisfactory treatment is by using injections more and probing less frequently. The author determined to try the effect of probing the punctum without slitting the canaliculus, followed by astringent injections over the inflamed surface. This treatment proved entirely satisfactory, and in about five weeks a patient went to his home in another State with apparently perfect recovery, and no destruction of tissue.

The following case was given as illustrating the author's method of treatment: Mrs. L. suffered from lachrymation of each eye for two years. There was severe lachrymal conjunctivitis of the right eye, the punctum being contracted one-half. On dilating the right punctum a No. 2 probe could be passed without difficulty, but the whole interior of the nasal duct had the peculiar velvety feeling that is caused by thick villous mucous membrane. The same condition, in less degree, was found on the left side. Treatment was commenced by applying a weak astringent and washing out the lachrymal canals thoroughly each day

with boric acid lotion, followed by a weak astringent. Once a week a probe was passed through the dilated punctum down to the naris, using a larger probe each time until No. 7 was reached. The result was satisfactory, and in six weeks the patient returned home apparently well.

Dr. W. Franklin Coleman read a paper on

SYMPATHETIC OPHTHALMIA.

Disease in the sympathetic eye generally occurs when there has been a wound or operation in the dangerous zone of the diseased eye. Becker, in 1875, collected twenty-two cases of sympathetic ophthalmia from cataract operations, foreign bodies lodging in the eye, and degeneration of a lost eye, or other causes. Dr. Coleman read in detail the clinical history of the disease, and enumerated the causes, histories and results of the treatment of a large number of cases. In regard to treatment he advised as per the following:

CONDITION DISEASED EYE.	CONDITION SYMPATHETIC EYE.	TREATMENT.
Blindness.	Normal.	Enucleation in unintelligent and children.
Blindness.	Sympathetic irritation.	Enucleate.
Blindness.	Sympathetic inflammation.	Enucleation not often advisable.
More or less vision.	Normal.	Do not enucleate generally.
More or less vision.	Sympathetic irritation.	Better enucleate.
More or less vision.	Sympathetic inflammation.	Do not enucleate.
Acute ophthalmitis.	Normal.	Never enucleate.
Acute ophthalmitis.	Sympathetic irritation.	Puncture and foment diseased eye, then enucleate.
Acute ophthalmitis.	Sympathetic ophthalmitis.	Treat ophthalmitis, and then enucleate.

Dr. F. C. Hotz said: I think the theory of the author in regard to the closing of Schlemm's canal and the approximation of the iris to the cornea interfering with filtration, cannot account for glaucoma. Pathological anatomy has so far failed to find the cause, and we have to rely on clinical studies to build up a theory which will account not for the late stage, the fully-developed glaucoma, where the sight of the eye has been permanently destroyed by the disease, and which the pathologist gets from the oculist after enucleation, but for the first stage, the premonitory symptoms before it becomes an acute attack; a stage which the pathologist has not yet investigated with his microscope. At that stage who can say certainly what glaucoma is? It is probable that various causes lead to the same result. I believe that the agglutination of the iris to the cornea, the compression of Schlemm's canal or any other part of the eye, are consequences, and not primary causes of glaucoma. I was somewhat surprised that, in a paper addressed to general practitioners, the author attached so little importance to the clinical symptoms in glaucoma, of a general character, such as gastric and febrile disturbances in connection with hemicranic headache. These symptoms often cause the practitioner to fail to discover glaucoma. I can recall a number of such instances. Last October a lady came under my care who had been under the treatment of a physician for four or five weeks, for malarial fever and dyspepsia, which was the beginning of an undoubtedly characteristic and typical attack of glaucoma. But the attending physician's attention was attracted by the coated tongue, the nausea, vomiting, severe headache and excited pulse, and he treated the patient for these daily attacks of headache, which he diagnosticated malaria, and used antiperiodic remedies, utterly disregarding the condition of the eye, although the sight was at first nearly extinguished, and only returned to a certain extent after the attack lost somewhat its severity. Another case: A poor woman lost one eye from glaucoma ten years before; the eye was blind and hard, showing the characteristic state of an eye in which glaucoma had run its course. She was attacked by a severe pain in the head extending over the left side, could not sleep for several weeks, was nauseated, vomited, and showed symptoms of some general disturbance. The physician treated her for the stomach trouble and headache, and although she told him time and again that her sight was getting poor, and suggested that an oculist had better examine her eye, he paid no attention to this, and the result was that two months after this attack the sight was entirely gone and could not be restored. In still another case both eyes were neglected until the patient could perceive only a little flicker of light, before it was considered necessary by the attending physicians to pay any attention to the eyes. Dyspepsia, gastric fever, malaria, and sick headache were the diagnoses, and the treatment was in accordance. I think it is well to bring out these points, and to call the attention of every physician to the fact that such attacks sometimes mean something more serious than a disturbance of the stomach, and that when the patient, during such attacks, speaks of the eyes as being troublesome, or the sight as becoming dim, it is worth while to pay attention to it, and to remember that acute glaucoma is often ushered in with these general constitutional symptoms.

Dr. Lyman Ware said: I have only a word to say about the disturbance of the equilibrium of secretion and excretion. It has been fully

demonstrated that it is only by restoring the equilibrium that sight is saved. I quite agree with DR. HOTZ regarding febrile symptoms, but it is my experience that they are *secondary* rather than *primary*.

DR. HENRY GRADLE said: The cases which DR. BETTMAN presented are of great interest from the fact that they have only lately been recognized. DR. GRUENING, of New York, was the first to point out that there existed affections apparently of the eye, but which in reality originated from the nose. I have watched for these cases ever since GRUENING'S paper first appeared, and would say that the cases in which the nasal trouble is *entirely* the cause of eye disease are not very frequent. But I have seen instances where affections of the eye were certainly complicated by nasal trouble, and the nasal trouble prolonged the eye disease. I recollect a number of cases of eye-disease either kept up or originated by nasal trouble. The first of these is a pseudo-erysipelas of the lids, which is not an infectious disease, but merely a secondary affection of the blood-vessels, only resembling erysipelas clinically. It is entirely due to irritation and engorgement of the blood-vessels in the front part of the inferior turbinated bone. A second type of nasal affection giving rise to eye-trouble is true periodical hay-fever, and a non-periodical irritability of the nose, resembling hay-fever. I have published four cases, and have since seen another, of periodic conjunctivitis characterized by the formation of granules and follicles, which trouble always receded in winter, to reappear again in the spring or summer. In two of these cases a diagnosis of hay-fever has since been made. I have seen a case which had been treated for trachoma by a number of specialists, where the history of the nose showed that the affection was of nasal origin. The same trouble may exist in a non-periodic form, and present all the symptoms of hay-fever, the trouble not being limited to any season, but occurring in any part of the year, lasting a few days or weeks. But these cases are not common. In one of these cases I was able to effect a complete cure by cauterization of the nose. A third type of nasal affection giving rise to ocular symptoms is true catarrh of the upper and front part of the mucous membrane of the nose, where the membrane is distinctly reddened and where there are generally slight and by no means prominent symptoms of catarrh. In these cases I have very frequently found troublesome epiphora without any stricture of the duct; in some cases the test was made by using delicate probes. Such cases, I can testify from my own experience, are entirely curable by simple treatment of the nose. I have found a not sharply-defined case of asthenopia, due not entirely to the nose, but complicated with refractive trouble, where nasal treatment was necessary to complete a cure. Once or twice I have seen polypi play the same rôle, and a number of times I have found the starting point of the irritation not in the front of the nose, but in the posterior part, in the form of the common adenoid vegetations.

This is a subject which has not been fully dealt with in literature, but I have several cases where the extirpation of the large post-nasal tonsil has given decided relief to the eye. Then I have found that in a few cases ulcers or chronic inflammation of the cornea were kept up by nasal trouble, which was probably started in the first place by a copious flow of tears from the eye. I have observed that local treatment by means of calomel, atropia, and the customary applications to the eye proved inefficient, while the addition of nasal treatment hastened the cure of some of these tedious cases. The nose was probably normal to start with, but the continual flow of tears produced either small erosions or some little catarrhal troubles of the mucous membrane at the front of the nose, subsequently increased to chronic catarrh, leading to congestive obstruction of the tear-passages, or exerting an unfavorable nervous influence upon the eye-trouble. Finally, as a rare instance, I will mention one case which is now cured. The patient was sent to me for polypi, which, however, proved to be the minor trouble in the nose, the real trouble being an immense vascular tumor occupying the entire floor of the right side of the nose, covering the inferior turbinated bone and reaching about to the middle turbinated bone. The patient had been reduced in strength, and the slightest exertion on his part produced hæmorrhage; therefore the most careful operative procedure was necessary. I finally succeeded in removing the entire tumor by the galvano-cautery in twenty sittings. As the tumor began to shrink the hæmorrhage was less, but he lost thirty or forty ounces of blood in six weeks. During the latter part of the treatment his right eye began to bulge, and he complained of double sight. It has remained healthy, but there was an unmistakable development of vascular tissue in the orbit and behind the eye, which receded by the time the tumor had been extirpated from the nose.

DR. BOERNE BETTMAN said: I was very glad to hear DR. GRADLE corroborate my statements. I am well aware that these cases are comparatively rare; although I have recorded in my case book about twenty, seen during the last two years. I am acquainted with the article published by GRUENING. My attention was first called to the subject by the work of HACK, and since reading that I have made it a point never to allow an eye patient to leave my office until his nose has received a very thorough examination. I have seen a number of cases such as mentioned by DR. GRADLE, but I

thought it better to describe to-night only the typical ones. The connection between ocular and nasal troubles is a point all oculists should bear in mind, and when they find no local cause for epiphora they should examine the nose.

DR. A. P. GILMORE said: I would like to add one word in regard to glaucoma, and that is the importance of tension does not seem to have been sufficiently dwelt upon. Any careful general practitioner can ascertain whether the tension is increased or not, simply by comparison with the tension of his own eye. All pain referred to the eyeball, with or without the accompanying neurotic symptoms mentioned in the paper, does not mean glaucoma. Unless there is increased tension you cannot diagnosticate glaucoma. The author does not mention BADAL'S operation in the treatment of glaucoma. It is certainly entitled to a place among the operative measures. I will only speak of one point in DR. STARKEY'S paper, viz.: epiphora. I do not believe with many, that epiphora is due primarily to a stricture which prevents the escape through the nose of the natural amount of fluid secreted, but is due rather to reflex irritation causing an hyper-secretion of tears. In health the eye is moistened with a moderate secretion. When the lachrymal gland is removed the eye contiues to be moist and the cornea retains its lustre. Tears are not essential to the lubrication of the eyeball; their function is to protect the eye against foreign bodies. A bit of dust under the lids will cause profuse lachrymation and the tears will flow over the face, not because of an obstruction to the natural amount of fluid secreted through the natural passage, but because of a hyper-secretion due to reflex irritation. For treatment I never use a probe larger than BOWMAN'S No. 6, usually No. 4. I seldom find it necessary to make BOWMAN'S operation in epiphora. I think its use is unnecessarily frequent. I use astringent and antiseptic solutions with a syringe small enough to be easily introduced into the puncture when slightly dilated. I am very careful to treat any nasal complications; it is impossible to treat diseases of the eye successfully without recognizing and treating reflex irritations of the nose.

DR. STARKEY said: My paper was necessarily cut down very much. As first written I had given some space and attention to cases similar to those mentioned by DR. BETTMAN. I had also spoken of the probability that in many cases of epiphora, where there had been inflammation of the tissues lining the lachrymal canals with partial closure, a continual irritation of the canal in some way, perhaps reflexly, so stimulates the lachrymal gland that the tears are poured forth more abundantly. There are well-known cases where the lachrymal canals have been completely closed by injury or operation, and yet lachrymation is not annoying, although the gland has not been extirpated; tending to show, as mentioned by DR. GILMORE, that the normal secretion of tears is ordinarily very limited. It seems to me that in many instances lachrymation is due to irritation propagated reflexly, and, therefore, in treating such cases I thought of trying to restore the mucous membrane of the lachrymal canals to the normal condition, as well as to look for and treat points of irritation elsewhere.

DR. J. E. COLBURN said: In cases of injury where there is danger of sympathetic irritation, a foreign body being lodged in the anterior chamber, iris, ciliary body, or the choroid, where the chances are that in order to give all the advantages of treatment the patient must necessarily be idle for a considerable length of time, and where the sight in the injured eye has been irretrievably lost, I think it advisable to make the operation of evisceration or abscission as early as possible. The patient, if a laboring man, is then relieved from a long enforced idleness and anxiety, and the danger that lack of care frequently causes in this class of cases. Where the appearance is first to be considered, and the patient can be constantly under observation, the operation can be postponed, but with the strict injunction the patient is to be under constant surveillance. In a large majority of cases where there is great damage done and the foreign body is out of sight, it is safe and advisable to make the operation, trusting to that to save the other eye. In a case that came under my observation recently a piece of steel entered the anterior chamber near the centre of the cornea, passed through the iris and lodged in the sclera. No operation was performed, and the fellow eye became sympathetically affected, and on account of its sympathetic disturbance had to be removed. The steel produced some local irritation, and the eye was caught and rolled strongly toward the nasal canthus, and the piece of steel was found projecting into the orbit from the sclera and was removed. The track of the steel through the sclera was surrounded by a large mass of fatty degeneration, which was also removed. Vision remained about one-half.

DR. W. FRANKLIN COLEMAN said: I agree with DR. COLBURN as to the desirability of timely enucleation in the case of a laboring man to save his time, but should ophthalmitis set in I should not, under any circumstances, enucleate the eye. I believe it is rare for German operators to risk removing an eye in a case of ophthalmitis, but in England they scarcely hesitate to remove an eye under any circumstances. I have never regretted recommending a patient to have an eye enucleated, but I have sometimes regretted that I did not urge the patient to have the eye out in order to avoid

the fearful risk of sympathetic inflammation. I am astonished at the position of so eminent an authority as NOYES, who says: "I hesitate to enucleate the eye on account of appearances, and do not do so unless symptoms of irritation or inflammation appear which I cannot relieve with medical treatment." In nineteen out of twenty cases the lost eye is not worth saving, but is a blemish, and an artificial eye would be more ornamental. And if a man wishes to get work he will deceive the very elect as to which is the real and which the artificial eye. I cannot see any advantage in not advising enucleation where the eye has been injured to such an extent as to menace the fellow-eye.

DR. GILMORE asked DR. HOLMES why he did not try a magnet?

DR. HOLMES replied that he had been in so much doubt what to do that he thought best to first try incision and forceps. He did not believe the best magnet could have liberated the end of the steel, buried in the tissues of Fontana's space. It is remarkable that so long a piece of metal should have been thrown through the cornea, making so minute an opening, and lodged in the anterior chamber, as described, without injury to the iris or lens.

DR. COLEMAN said: To my mind the magnet in the eye is a delusion and a snare. For instance, if you introduce a magnet within the eye not knowing where the foreign body is before placing the point of your magnet, you have to search the whole cavity of the eyeball and reduce it to a jelly before you can extract the body. Granted no great harm is done if you do not extract it with the magnet, for you can afterwards enucleate the eye. But so far as I have tried it, and have seen others experiment with the magnet, it does not give satisfaction.

DR. HOLMES replied: That is very true in many cases, where the steel cannot be seen with the ophthalmoscope, but I think where a view of the foreign body can be obtained early, the magnet may be employed with brilliant results. There are now so many cases reported with excellent results after extraction with the magnet, that I cannot think it a delusion and a snare by any means.

DR. COLBURN said: I recently saw an interesting case in which the foreign body was lodged about half way between the ciliary body and the entrance to the optic nerve. The operator cut through the sclera about where he thought it was lodged, passed the magnet in and brought out the foreign body apparently without wounding the retina at the point of attachment. The patient made a good recovery.

Correspondence.

PECULIAR ERUPTION ACCOMPANYING PNEUMONIA.

Case No. 1.—LUCY S., aged 3 years and 4 months, was taken sick on Jan. 12th, 1884, with unmistakable symptoms of pneumonia, catarrhal form. The disease had its full duration, and just as convalescence was being established, there appeared an eruption resembling very much that of varicella, with the exception that the vesicles were much larger, varying from half the size of a common pea to one-half and three-fourths of an inch in diameter. There was not the space of an inch on the entire body and extremities that was not covered with this eruption. It ran almost the same course as would varicella, except the duration was about twice as long.

Case No. 2.—JENNIE V., aged 3 years 8 months, taken sick Jan. 2d, 1887. I diagnosed pneumonic fever, catarrhal form. This case ran the same course as the first, and the eruption made its appearance at the same time as it did in the first, both children making a good recovery.

At the time of the sickness of the children the fathers were occupied in "rendering" dead hogs that had died with the various diseases that hogs are affected with, and upon examining some hogs that have died in this locality within the past two months, I find they have had catarrhal pneumonia.

What I think peculiar in the cases, is the identity of the two cases and the occupations of the fathers.

Was it possible that the children became infected with the poison from the dead hogs, and was the eruption what English writes term swine-pox?

I. N. MILLER, M. D.

MOUND CITY, MO.

ATROPINE AND QUININE.

I have lately been administering sulph. atropine in $\frac{1}{120}$ gr. doses to one of my patients in connection with quinine in 3-gr. doses, and found a remarkable tolerance of the former drug. Having left off the quinine for a few days, I was surprised to find that my patient could no longer tolerate the atropine as before, the symptoms produced being excessive dryness of the throat, dry cough, with difficult deglutition. On resuming the quinine, the toxic effects of the atropine passed off and she was able to continue the atropine as before. I should like to inquire through your journal if the antagonism between quinine and atropine, as shown by this case, has been observed by other practitioners, or is there some idiosyncrasy in the patient herself to produce it.

I will add that there was no other change in the treatment at the time.

D. P. MCLACHLAN, M. D.

YORK, MICH.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., MAR. 10, 1887.

Notes.

Our readers may have noticed the increase in the number of original contributions to our pages during the past few months. This increase has certainly been very gratifying to us, as evincing a growing appreciation of the AGE as a medium of communication between the members of the profession. The widely-separated places from which the contributions come, are, furthermore, very conclusive evidence of the national circulation of the journal. Without any doubt, the circulation of the AGE is not exceeded in size or scope by that of more than three other medical journals of this country. We are sure that we need offer no apology, when, as in the present issue, the number of contributions encroaches on the usual editorial space. A number of book-notices which are unavoidably crowded out, will appear in our next.

The question of how to determine whether the woman shall bring forth a male or a female seems to be exciting increased interest with the apparent growing disparity between the lords and the ladies of creation. In this country an extensive series of observations was made on cattle in Texas, the conclusions from which were published several years ago. Dr. Kisch, in the Centralblatt für Gynakologie, has formulated a law which conforms very closely with these conclusions: "When the husband is at least ten years older than the wife, and when at the same time the wife is within the age of highest reproductive power (twenty to twenty-five years), there will be a very distinct excess of boys born over girls. This excess will be marked, but less distinct, when the husband is at least ten years older than his wife and she is over twenty-six. When the husband is older than the wife, and she has not attained the age of highest reproductive power, the female births will be in excess. This excess of girls born over boys is most marked when husband and wife are of the same age. Yet when the wife is the elder there is a distinct excess of male births." Dr. Kisch admits that both his own and Hofacker's statistics are not extensive enough to warrant very decided scientific conclusions, but interested parties will, doubtless, find in them a basis for experiments.

The Michigan State Board of Health was complimented at the 276th meeting of the Brooklyn Pathological Society, Feb. 24th, 1887, by the adoption of the following preamble and resolution: WHEREAS, the State Board of Health of Michigan, has been for many years a pioneer in the investigation of disease and the collection of vital statistics, and WHEREAS, the result of these investigations and of the collection of these statistics, has been to stimulate men and boards of health throughout the country to undertake similar work for the public good, therefore be it *Resolved* that the Brooklyn Pathological Society heartily endorses and commends the course so admirably planned and so efficiently followed by the State Board of Health of Michigan, and respectfully but earnestly, appeal to the legislature of that state to be liberal in its support to its State Board of Health, and to widen its influence and usefulness by appropriating the necessary funds to establish and maintain a Laboratory of Hygiene.

The Medical and Surgical Reporter tells of a rather ludicrous incident which happened to a physician at New Kingston the other day. The physician, DR. GIBSON, who has lately moved to that place, was called upon to see a patient—an aged woman, but of strong muscular build and energy. He thought, after some little conversation, that she suffered with rheumatism, and was about to place a seat for her near the light in a warmer room, where she had followed him with her husband, when, without a word of warning, she struck DR. GIBSON in the neck, and with so violent a blow that for a moment he was afraid he would lose consciousness. The unfortunate woman's mind was unbalanced, and for some time past she has labored under the hallucination that every physician who has been brought to see her was a horse doctor, who mistook her for an animal of that genus, and wished to give her that kind of medicine.

EMIN PASHA, for whose relief Mr. HENRY M. STANLY recently left England for Equatorial Africa, is no less a man than the celebrated DR. HERMANN SCHNITZLER, better known as Emin Bey, and Surgeon-General of the Equatorial Provinces under CHINESE GORDON. He succeeded GORDON in the governorship, and has been engaged in bringing a barbarous region into a state of civilization. He has now been shut off from the outer world for three years by the barbarians to the north of him. He is a great linguist, and in addition to his medical

learning has an intimate acquaintance with geology, botany, meteorology, anthropology, geography, etc. The little leisure which he has had for the past five years has been devoted to the sick.

DR. JAMES DAVIES states in the Therapeutic Gazette that the Druidic College of the twelfth century considered tannin the most potent of all the products of nature in producing sterility, and that tea-drinking, as practiced by the public, undoubtedly acts in the same direction.—*Boston Med. and Surg. Jour.*

Unquestionably the excessive use of tea and coffee has much to do in producing sterility among the antique spinsters who occupy their time and talent in correcting the excesses of others.—*The Weekly Medical Review.*

The Review editor must either be a very brave man or must occupy a strongly fortified position. In many sections such insinuations would be the percursors of an infinite amount of trouble.

The following are a few popular fallacies:

1. That a baby should be washed every day.
2. That sitting in the sun will give you chills.
3. That a homeopath gives different medicine from a regular physician.
4. That eruptions on skin from medicine show that the disease is coming out.
5. That a man grows in height in the spring and in bulk in the fall.
6. That scarlatina and scarlet fever are different diseases.
7. That sleeping in the moonlight will make you crazy.
8. That growing flowers are dangerous in the sick-room.

A young woman in Pennsylvania, had a man arrested on a charge of assault, she being at the time in her ninth month of pregnancy. The evidence was not conclusive owing to lack of witnesses, and the prisoner was likely to be discharged. An adjournment of the case was, however, had, and in the meantime the woman gave birth to a child whose arm was badly swollen, and whose neck bore the marks of four fingers and a thumb. The birth-marks corresponded exactly with the injuries which the mother swore the prisoner inflicted on her a month before. When the case was again called, the child was placed in evidence, and the prisoner was convicted.

The Indiana Medical Journal displays a wonderful familiarity with the wisdom of the serpent in the following: "The country physician aspiring to city life may join with some of his brethren who know the ropes, rent, charter, elect trustees, issue catalogue, organize, and lecture and be known as 'professor.' Rooms, $200; outfit, $100; diploma stone, $100; permanent endowment fund for catalogue and graduating expenses, $100. Ten students, if they pay, will be enough to foot the bill. It is not by any means necessary to have so many students as professors, and a board of trustees from the out towns may be had for the asking."

PROF. PARVIN many years ago, while a resident of Indianapolis, started a medical journal of high order. Many physicians sent him their names as subscribers but they did not send the money to pay their subscriptions. He paid the bills out of his own pocket, in the belief that these physicians would meet their obligations. Thus he sunk four or five thousand dollars before he could accept the facts.—*Cincinnati Medical News.*

This furnishes but another illustration of the popular saying that a man may be very smart and yet not know how to run a hotel.

JOUSSET, a leader among European homœopaths, gives the following expression to a belief that is in him: "Homœopathy cannot take the place of palliative medication; nor of surgical medication; nor of antidotal medication in cases of poisoning; nor of parasiticide medication whenever clearly demanded; nor of medication by mineral waters; nor of hydro-therapeutic medication; nor of medication by electricity; nor even of empirical medication. Homœopathy is not everything, and liberal medication must include all collateral modes of treatment."

W. D. MILLER, an American, has been created a professor in the University of Berlin. He is the first of his countrymen on whom this distinction has been conferred. His eminence is chiefly as a microscopist, and his most important discovery was that of the particular bacillus which causes dental caries. When he discovers the agent which will destroy this microorganism, he will have, indeed proven himself a benefactor of his race.

We think we can discover evidences of a very general tendency on the part of our local profession to no longer let their light be hidden under a bushel. There are some who enjoy facilities for such advertising as is not forbidden by the Code, and those who are debarred from these have for some time been growing restitive. The result is the not infrequent appearance in the newspapers of names which erstwhile were never to be seen there.

WILLIAM H. CRANE, the comedian, tells this new story of his boy: "His mother asked him the other day whom he had been playing with, and he answered that he had been playing with old Jule Seligman's little boy. 'Hush, my dear,' cried his mother. 'that's not the way to speak

of Mr. Seligman. His name is Julius, not Jule.' 'Then,' replied the precocious child, 'I suppose that my papa's name is Billious?'"

It is reported of Bismarck that he took nine glasses of brandy and water, during his recent speech before the Reichstag, in which he declared that that body must either obey his orders, or be dissolved. It did'nt obey his orders and it was dissolved Bismarck, however, still lives, but whether in spite of, or in virtue of the brandy, is still a disputed question.

The learned witness who testified at a coroner's inquest that the deceased was found in a position of dorsal decumbency, would have commanded more respect by declaring that the corpse was found lying on its back, and his standing as a physician would have remained just as secure.

DR. WM. C. WILE, of the N. E. Medical Monthly, has removed to Philadelphia, where, it is said, he will form a partnership with DR. SHOEMAKER, of the Bulletin. Symptoms of this thing have been developing for some time, and it required but slight powers of prognosis to foretell the outcome. We wish 'em both well.

An eastern druggist mistook the sign "ss" for 88, and put up 88 grains of podophyllin, which, given to a patient, promptly killed him.

Medical Progress.

THE TREATMENT OF INSOMNIA BY FOOD, BATHS AND EXERCISE.—The first case of insomnia with which I had to deal, my own case, taught me the utter uselessness of depending solely upon hypnotics for the relief of this condition; and subsequent cases treated successfully by food, baths and exercise have shown that hypnotics are not only not to be depended upon, but that in many cases they are not required at all, and do more harm than good. I do not wish, however, to be understood as not advocating the use of hypnotics in all cases of insomnia; my remarks must be taken to apply only, so far as my experience goes, to febrile insomnia, or the insomnia of convalescence from acute diseases, to the condition of sleeplessness arising from long hours of mental activity or excitement, to insomnia from exhaustion. The two last may often be classed together.

In febrile insomnia there is a greater or less degree of cerebral excitement, which, when active, calls for an exhibition of bromides and chloral. In a still more active stage morphia may be indicated, especially if pain, such as headache or backache, be so pronounced as to demand attention; but as a rule, drugs which interfere with elimination should not be given. On this account paraldehyde is of very great value in some of these cases. In the eruptive fevers, when the cutaneous irritability is so great as to produce insomnia, sleep may be often produced by the use of warm or tepid baths. In many of these cases of febrile insomnia, I have noticed that the patient would often fall asleep soon after the administration of food, and more particularly if a bath was administered just before the food was given.

Wakefulness in these cases, and in many others, may be considered as the symptom of an irritable weakness of the brain or nerve centres. We know that in the latter stages of a protracted illness the condition of insomnia often depends on the malnutrition of the patient, and that the indication is to furnish material which will delay or stop the process of malassimilation or disassimilation. The failing power of the heart, due probably to the same irritable weakness of the nerve centres which causes the wakefulness, demands, as we all know, such diffusible nutriment as the system can assimilate with the least expenditure of force; and hence, we give milk and meat juices, sometimes alcohol, but rarely opiates. There is a tendency, I believe, to rely very much upon hypnotics in these cases, as in all cases of sleeplessness; and I believe this to be wrong. To say nothing of other objections to their frequent use, they disorder the stomach, and in the weakened condition of of the patient his system soon falls into the habit of demanding these aids to artificial sleep. There is usually but little positive appetite, and bromides and opiates take away whatever there is.

But it is not alone in the cases of febrile insomnia that the nervous system is in a condition of irritable weakness. It is frequently seen, and I believe it to be the cause of a very large proportion, if not all of those cases of insomnia from intense mental activity or excitement, and of insomnia from exhaustion. Among hard-working college students, newspaper men, accountants, and men whose lives are given to literary pursuits, insomnia from exhaustion or excitement is not an uncommon affection; and it is common also in women who have been exhausted by protracted nursing of a sick child or friend, or who have been subjected to some unusual excitement. In dealing with this condition it is not sufficient to say that a complete change of habits must be made. In the majority of cases the patient cannot change his or her habits, and take a long vacation or a protracted voyage; and in the majority of cases this is not necessary.

I have noticed that most students, and women, who are troubled with insomnia, are dyspeptic, and, in fact, I rather believe that a greater or less degree of dyspepsia or apepsia, and gastric irritability, will be found in all persons who are much troubled with insomnia. It must be very evident that a course of bromides or other hypnotics will not ameliorate the condition of the gastric or intestinal mucous membrane. It is quite clear also, that bromides will not permanently lessen the degree of nervous irritability which depends on the want of proper food. I have found it not only possible, but comparatively easy to treat cases of this kind without a single dose of any hypnotic, and without a change of or vacation from work. In some cases one or two doses of bromide of sodium or potassium, or paraldehyde has been necessary.

In cases of students who complain of insomnia, I have usually found that they take but little exercise, that they are constipated, have

but little appetite, and suffer with gastric oppression after the main meal of the day, whether it be about midday or in the evening. They usually drink tea or coffee, sometimes immoderately. If the case has gone on for some time, there is an evident condition of anæmia. The first thing I do is to unload the bowels, and keep them open with cascara sagrada, though to begin with I usually order blue mass. The medicine ordered, as a tonic, is either nitro-muriatic acid (equal quantities of nitric and hydrochloric acids and water), or tincture of the chloride of iron ℥ ij, Fowler's solution ℥ ij, and strychnine gr. j. Two or six drops after each meal (or more), or else Fowler's solution alone. In the majority of my cases with students, I have used small doses of these drugs, and sometimes no medicine except the purgative. They are then instructed to eat before going to bed, having put aside every form of work at least half an hour before bed time. A formal menu cannot be made out for these cases; they should simply be instructed to eat, and if they are hungry they should eat whatever they want. A glass of milk and a biscuit or a piece of toast is sometimes all that can be taken at first; or a mashed potato buttered. In a short time the night appetite will grow, and the appetite will then need no particular directions. If possible the night meal should be taken in another room than the sleeping apartment, and for men in the city, it will be found advantageous to go out to a restaurant. The idea of going out for something to eat, and having to wait a short time for it, will excite the appetite.

Before eating, however, a bath should be taken. I much prefer cold or cool baths, which should be given with a sponge or stiff brush, and the body thoroughly rubbed off with a coarse towel afterwards. The bath need not be more than five minutes in duration. The objection to the warm bath is that the patient is liable to take cold after it, and it is not so refreshing as a cool or cold bath. After the bathing and rubbing, or after eating, a moderate amount of exercise should be taken. For this a few minutes with Indian clubs or dumb-bells is sufficient. Further than this, the patient should go to bed at the same hour every night, and arise at the same hour every morning.

I have seen a considerable number of cases of insomnia among night men on morning newspapers. These men usually take the evening meal about 6 o'clock, and then often work until 2 A. M. Within the past two years and a half, I have had more than twenty cases of this class, and I have not given a dose of medicine, other than a purgative, to a single one. These patients cannot conveniently stop to take a bath, and then go out to eat. They are instructed to go from the newspaper office to a restaurant, and eat what they want. Here we usually find that the appetite is good. After eating anything from a half a dozen oysters to a good steak, or as much, in fact, as one would eat for a hearty breakfast, they go home, bathe the face, head, neck and chest, take five minutes' exercise and go to bed. In each one of my cases of this class, the patient has reported that the treatment was a success from the first.

Since the age of 18 I have been more or less troubled by insomnia, and nothing has ever given such decided relief as a course of hearty meals just before going to bed. When the temporary insomnia has been relieved by this, I continue the sponge-baths and exercise before going to bed; but sleeplessness often returns after a sustained degree of mental labor and excitement, and is almost immediately relieved by a generally hearty meal before going to bed. At 19 years of age, while a student of medicine, I was dosed for this condition with every then known hypnotic, without any perceptible effect. Accidentally, I found that after eating late at night I slept well; and I now make it a rule never to go to bed hungry, and always to eat at night when I am in the midst of an unusual amount of work, or engaged in work of an unusually exciting character.

I have had to deal with only two cases of insomnia in old people. In both these cases they had been advised to take a "night-cap" before going to bed. At first the remedy was efficacious, but in a short time it was found that the quantity of alcohol had to be increased, or it had no effect, and finally an excessive quantity of alcohol was demanded. I rapidly diminished the quantity of alcohol as the amount eaten was increased, until, with the aid of a full supper and no alcohol whatever, the sleep was plentiful and much more refreshing than before. I do not know of anything which will more readily impair a digestive apparatus than alcohol on an empty stomach. Further than this, one runs the risk of inducing the alcohol habit by prescribing in this way; and it must be acknowledged that the drowsiness induced by alcoholic drinks will not pass into a natural and calm sleep; and an artificial sleep is only demanded when a patient is positively ill. A cup of hot beef-tea (made from some good extract of beef) taken just at bed time, will often be sufficient to cause a good natural sleep.

There is a popular superstition that grown people should not eat immediately before going to sleep; that it will give them indigestion or "nightmare," or both. I cannot see why adults are so very different in this respect from babies. We know that young children awake at night and must have something to eat before they will sleep quitely: and some children actually fall asleep with a nursing bottle leaking into the mouth. It may be true that digestion is carried on slowly during sleep, and that the digestive function is less active; but here one need not be in a hurry for the completion of the operation. The average person should be in bed seven or eight hours, which is time enough for the digestion of almost anything edible. In our American city life I think the digestion carried on through sleep probably has the better chance for thoroughness.—W. G. Eggleston, M. D., in *Jnl. Am. Med. Ass.*

The Use of Sedatives in Insanity.—I have mentioned the use of bromide and of chloral, and I may add that *alcoholate of chloral* has been used in France. It is said to be less disagreeable than the hydrate. Its uses and doses are similar to those of chloral.

And now I will give the general results of my experience with some other drugs.

Hyoscyamine has a right to be more fully discussed than most of the others, for it has held its own and perhaps gained ground of late years. It is a classical remedy, in the more coarse form of tincture of henbane. When its use was first studied there was unfortunately a

good deal of confusion as to what was hyoscyamine and what was not, the drug sold as such having very uncertain powers and being at one time inert and at another deadly. This I dissolve in spiritus ætheris nitrosus, so that I can begin with about one-sixtieth of a grain, given by the mouth.

As to the times of administering this drug—I never give a first dose at night lest the symptoms should be more severe than are expected. I generally choose the middle of the day, after a full meal. My reasons for doing this are that I have time to watch the effects, and have also the chance of giving the patient one good meal in case the hyoscyamine should prevent him taking food. I have seen in one case of great emotional excitement a single dose of the drug produce calmness which was permanent, but at the same time it would not be right for me not to mention another similar case, that of a young, noisy emotional girl who after the exhibition of one-sixtieth of a grain passed into a state of profound stupor and was dull for many months before she recovered.

I rarely give the drug in general paralysis of the insane, for the reason that these patients, however noisy they may be, are yet nervously very weak and easily affected. In this I know I differ from some men of large asylum experience who keep most of the general paralytics quiet with hyoscyamine.

The greatest benefit from hyoscyamine follows, according to my experience, in the following conditions: First, when recurrent fits of excitement occur either in chronic cases or in neurotic subjects, who appear to be passing into a state of mental weakness or of chronic recurrent mania as a result of the frequent attacks of excitement which appear to be creating a habit. In these cases, especially if you can give the first dose just before the outbreak, when from general symptoms you see the danger impending, you may stave off an attack, and if this be done from time to time the whole habit may be broken down. In some cases of chronic destructive mania with great sleeplessness and violence, this drug not only prevents the patient from doing harm, but also may give sleep when morphine and chloral have no effect whatever. In these cases it is necessaey to be sure that the patient's appetite is not being impaired by the drug, for if these violent patients go off their food there is great danger of exhaustion. In some cases of restless melancholia with or without hallucination, doses of one-eightieth of a grain will give quiet. In the more violent recurrent cases it is best to give at once one-tenth of a grain subcutaneously. This may be found to be enough to ensure quiet for two days. The patients as a rule take a great dislike to the drug, and the doctor who has ordered it is often called by them a poisoner.

Its great use is in the recurrent cases, in some of restless destructive violence, with some few restless melancholics, and very rarely I believe in general paralysis.

Morphine. The sleep given by morphine has been extolled so often that I have great hesitation in writing at all about it. The drug is administered in all asylums from time to time, but I believe at present much less than it was formerly. The French school give it in ever-increasing doses subcutaneously, continuing the drug until sickness is induced. This nausea is kept up for weeks, and the dose may be raised to fifteen grains subcutaneously. I have no experience of such very large doses, and have never pushed it much beyond two grains. I cannot speak highly of it.

I generally give it in cases of subacute mania, or better still in some cases suffering from hypochondriacal symptoms with complaints referred to the gastro-intestinal canal. It is of service in some cases of melancholia occurring at the menopause, and also in some of those senile cases in which restless dread is the chief symptom. One-sixth to one quarter of a grain *subacute*, every four hours, will often do good. It may also be necessary to give some aperient in the morning, though if the drug is doing good the morphine does not seem to act as a constipating agent.

Tincture of opium, or the tincture with camphor, is of use in some of the more over-sensitive cases, but I have seen so many cases temporarily relieved, only to relapse, or else acquire an opium habit, that I do not often give it. In cases where the patient is already refusing food I do not like it at all.

Paraldehyde came to us with such a very strong recommendation that I gave it a fair trial, but as the result I can only say that it seems to me to do less harm as a rule than chloral, and in some cases of mental disturbance associated with sleeplessness and simple melancholia, with inability to apply one's self to work, where no bodily disease was present, it seems to be a useful addition to our remedies.

On the other hand many patients cannot be induced to take it, as its taste is very disagreeable, and it gives a most persistent odor to the breath. It may be given in doses similar to those of chloral. It has been recommended to be combined with syrup of orange and tincture of vanilla, but I think a free dilution with water, say one and a half ounces of water to a drachm of paraldehyde, with two drachms of syrup of orange, is as good as anything. In my experience there does not appear to be any cumulative effect, but on the other hand patients soon get used to it, and the dose has to be increased.

Hypnone, which has a very cherry-laurel like odor and taste, and is unpleasantly pungent, has been recommended to allay nervous irritability; it lowers blood-pressure, and is said to alter the composition of the blood. I have used it in a fair number of cases, and have given it freely diluted, and with syrup of orange. It may be given with alcohol and syrup of orange, or with peppermint water. I have found in some restless cases of active melancholy that it is useful, and in one case at least it appeared to check an attack of recurrent mania. But on a second occasion the patient was in no way benefited by its use. Hypnone has so far produced no ill effect. Five to ten grains is a dose, but a drachm may be given. It does not seem suited for subcutaneous use. In many cases this drug failed to give sleep, but in simple insomnia where there is no pain, it succeeds fairly well. In Bethlem Hospital it has produced quiet in agitated cases when all other drugs had failed.

Urethane has been given a good deal during the past year. It can be used hypodermically in doses of five grains, or by mouth from one drachm to two drachms. This drug is much vaunted for allaying excitement in cases of chronic weak-mindednass. In many sleepless

restless cases of melancholia, it is worth while trying ten grains twice a day. It often produces sleep within a quarter of an hour. It is fairly pleasant, and can thus be given to suspicious patients or to children. If a fairly large dose (60 grains) does not produce sleep it is probably of no use. Its use should not be prolonged beyond a few days without a pause, or it will fail. It may be given dissolved in water in the proportion of one part to ten.

This sums up my personal experience of the more powerful sedatives.—GEO. H. SAVAGE, M. D., in *The Practitioner*, Jan., 1887.

HYDRASTIS CANADENSIS IN UTERINE HEMORRHAGE.—In a paper on this subject by DR. R. W. WILCOX, published in the N. Y. Med. Journal, Feb. 19th, 1887, we excerpt the following:

The recorded experience in the use of hydrastis canadensis covers more than one hundred cases. Before adding my own, I would state that metrorrhagia especially and menorrhagia have been the determining symptoms for the use of this drug. I would define menorrhagia as a condition of menstruation when the flow, previously normal, becomes profuse, or has always been profuse, when compared with that of women of the same station and time of life, and is evidently too great a loss for the patient to bear. Although nothing, so far as I know, will conceal its unpleasant taste, yet I have given only the fluid extract, in doses of twenty drops three or four times daily in a wineglass of water, in cases of fibro-myomata, subinvolution, and hemorrhagic endometritis continuously, in other cases for ten days before and during the menstrual period. I have never used hydrastin or the other alkaloids, because of the great variations in their strength.

I have used hydrastis canadensis in three cases of uterine fibro-myomata.

My conclusions in these and the subsequently enumerated cases are supplemented by the results of treatment in the observations of the writers whom I have already mentioned. Hydrastis checks the bleeding from uterine fibro-myomata by the production of persistent anæmia, unaccompanied by the distressing cramps of ergot or the flooding from the alternate contractions and relaxations. So in the cases of small fibroids it is preferable where their expulsion would probably be attended by hemorrhage or septicæmia. We all know that enucleation by the spoon-saw is frequently followed by death, that removal of the ovaries (castration), or removal of what has been termed, curiously enough, the uterine appendages, is generally unnecessary and contra-indicated, aside from the great danger to life, on both social and moral grounds. In face of the experience of the various observers above enumerated, every man, before resorting to abdominal section, should consider that he may needlessly sacrifice a human life.

Of hemorrhagic endometritis I record seven cases, five being cases of endometritis fungosa.

In hydrastis, then, we have a sovereign remedy, in endometritis fungosa, even when curetting has failed to arrest the bleeding. I have seen a fatal result from the apparently simple operation of curetting. That there is danger is attested by the number of so-called antiseptic curettes to be found in the market. With the use of hydrastis no confinement to the bed is necessary.

Sixteen cases of subinvolution of the uterus have been treated by hydrastis.

All of these patients were examined, and in many instances the uterine cavity measured from time to time. The average duration of treatment was about that of preparation for the operation of closure of the cervix. Had these patients come under my observation a few years before, I should have undoubtedly operated upon the greater portion of them.

Hydrastis canadensis, then, by its faithful use, will often render EMMET'S operation unnecessary. We see the uterus becoming smaller, the leucorrhœa diminishing, the erosions healing, the displacements becoming rectified. Apparently it is to this class of cases that SHIVESTIZENEFF refers, although he does not apparently recognize a lacerated cervix.

I have treated successfully five cases of climacteric hemorrhage with hydrastis.

The results obtained in these cases I regard as admirable, and believe we have a valuable remedy in this class of cases, which sometimes are very difficult to relieve. It is only fair to say that I have also used the bromides sparingly and arsenic somewhat vigorously, but I feel positive that, in removing one cause of general anæmia, hydrastis has been of great benefit.

Nine cases of pelvic inflammation have come under my care which have been treated with hydrastis. The more accurate diagnosis will begiven with each case.

Since I have been using hydrastis in these cases I have abandoned the use of iodine, to some extent that of hot water, and in a measure local treatment. I should even be inclined to use this remedy in pyosalpinx, because by it we can reduce the hyperæmia without producing contraction of the tubes. I have seen too many healthy tubes removed, to operate before having exhausted medical therapeutics, and, further, I have found post mortem that even pyosalpinx can become quiescent, the pus becoming cretaceous, the whole process apparently never having given rise to any symptoms.

Three cases of congenital anteflexion have been treated with such marked relief of symptoms that I report them here.

In this flexion of the uterus, producing what has been called obstructive dysmenorrhœa, although the worst cases as regards pain and intractability, have been cases with a patent uterine canal, the artificial anæmia has not failed to relieve the cramps, the pains, and generally the nervous symptoms as well. This drug also obviates the necessity of having recourse to the operation of posterior section, which is ordinarily one of the most fatal of all the minor operations. In these cases, if hydrastis is employed, local treatment is entirely unnecessary. I would even go farther and say that, in many cases, an examination can be dispensed with. The only interest that the patient has is that her symptoms shall be relieved; that is the only interest that the physician should have, and, if it can be accomplished without an examination, I regard an examination as entirely unnecessary. I am prepared to say even more: that I would have it the established rule that no examination of an unmarried woman should be made unless with the unanimous decision of a consultation, one of the physicians, at least, to be a general practitioner.

In this paper I have aimed to show that results can now be satisfactorily attained by medical means which were formerly reached only by surgery. I regard every step in this direction to be a decided advance, because it brings gynæcology into the hands of the general practitioner to a greater and still greater extent. To do this is, I maintain, the first duty of the specialist. Before closing, I wish to remind you that disputed questions have never been settled by the specialist, and rightly so. They come for their final verdict before the jury composed of general practitioners. The gynæcological question of to-day is this: Shall we lead the revolt against needless operations, dangerous mutilations, and unnecessary and debauching examinations, or shall we wait to be driven into line by the outraged sentiments of the profession at large?

CHALK OINTMENT AS AN APPLICATION IN ERYSIPELAS.—My former preceptor, Professor Hughes Bennett, of Edinburgh, used to say that, whenever a long list of remedies was recommended as of value in the treatment of any disease, one might feel sure that very little was really known either about the nature of the disease or the means of expediting recovery from it. I think he specifically mentioned erysipelas as an instance in point.

Certainly, both the local and the internal remedies which have been vaunted as beneficial in this disease are sufficiently numerous. I feel, therefore, some hesitation in recommending one which may or may not be novel, but inasmuch as it is certainly harmless, if not actively beneficial, and has stood the test of some experience, I venture to direct attention to it. The local application I now allude to is an ointment composed of prepared or precipitated chalk and benzoated or purified lard *

It appears to be quite immaterial whether the *creta præparata*, or the *calcii carbonas præparata*, of the Pharmacopœia be employed. Although the latter is a crystalline powder, and the former amorphous, both, when pure, are for all practical (*i.e.* clinical) purposes impalpable. To secure suitable consistency, and to ensure full benefit, it is necessary to incorporate a large amount of chalk in the ointment. It is noteworthy that lard will blend with an extraordinary quantity of chalk, either by beating in a mortar, or by adding it gradually to the lard previously melted. It is possible to make a very dense ointment by blending two and a half ounces of chalk with one ounce of lard. This is too firm to apply to a painful erysipelatous part, and in cold weather it almost crumbles. Experiments have been made for me both by Messrs. Dinneford and in the Hospital Apothecary's department with prepared and with precipitated chalk, and the best results as to quantities have been attained by mixing *equal proportions* of each, the lard being previously melted. Half a drachm of pure carbolic acid may be added to each ounce of the ointment. That prepared with *creta præparata* is of the color of putty. The other is pure white. Both are equally serviceable.

As I have already stated, I am unaware if this local application has been previously employed. I can find no recommendation of it in any work on Materia Medica known to me. I have used chalk ointment occasionally for many years, but not of the strength proposed in this paper.

The earliest recommendation of a thick chalk ointment I can find is that by Mr. J. C. Spender, of Bath, who introduced it as an undoubtedly valuable preparation for intractable ulcers of the leg. In his book entitled *Observations on the Causes and Treatment of Ulcerous Diseases of the Leg*, published in London in 1835, he remarks that the best outward application is an ointment containing a very large quantity of prepared chalk. "The earthy matter," he states, "must be in a much greater proportion than enters into any ointment in the Pharmacopœia, consisting of about three pounds of lard.*

He advises that the lard be first melted and the chalk gradually added in order to secure more intimate blending than can be attained by simple admixture or trituration.

In a re-issue of this book by his son, Dr. J. Kent Spender, of Bath, in 1868, the same process is again recommended. The ointment is to be applied with the finger and smeared thickly over the erysipelatous part. A mask of plain lint or of boracic lint should be laid over this and properly secured.

Patients express themselves as feeling relieved by this, and prefer it to other applications which may have previously been used † An ointment of this kind and consistency presents several advantages over the old method of dusting flour over the affected part, especially on the face, since, to be effectual, the dredger has to be constantly in use. The flour also gets within the eyelids, causing sometimes great irritation of the conjunctivæ. I venture to commend, with some confidence, the local application of chalk ointment in erysipelas as being at once cleanly, unirritating, readily procurable and trustworthy, and at the same time cooling and soothing.

In severe cases, it may be necessary to reapply the ointment twice or oftener every twenty-four hours.‡ I think I may add that this preparation is now the favorite one in the erysipelas wards of St. Bartholomew's Hospital. —SIR DYCE DUCKWORTH. M. D., F. R. C. P., in *Practitioner*.

SIMPLE METHOD FOR REVIVING PERSONS APPARENTLY DEAD.—Various forms and kinds of apparent death have been described, but these distinctions refer mainly to the initial stages of such conditions, while the morbid state known as "apparent death" (SCHEINTODT), when completely developed, is always the same, being characterized by a weakness and paresis of the heart and by a strangulation of the circulation due to the latter. All methods, therefore, intended to resurrect such individuals, must be directed against the debility

* I disapprove of vaseline as a basis for most ointments

* Op. cit. p. 64.

† I once was called to see a case of erysipelas of the face in which white paint had been employed. It caused fearful suffering, was distinctly mischievous, and, worst of all, could not be removed.

‡ I find in Dr. Druitt's Surgeon's Vade Mecum, a formula for chalk ointment: R. cretæ precipitatæ ʒi. ol. olivæ ʒiij, adipis ʒss. M. For burns, excoriations with acrid discharge, etc. P. 776: edition of 1869.

of the heart and against the impeded circulation; but thus far our aim in these cases has been mainly the maintainance of respiration, though the latter has probably to ascribe its effect only to its power of stimulating the heart to renewed activity.

At a meeting of the last congress of German scientists this subject was discussed, and DR. H. FRANK mentioned that there are but two ways to stimulate the heart: electricity, and mechanical concussion of the heart. The first is considered dangerous by him, as it may easily destroy the last power of contraction remaining in the organ; but what is termed "pectoral concussion," is decidedly preferable. F.'s method is as follows: He flexes the hands on the wrists to an obtuse angle, places them both near each other in the ileo cæcal region, and makes vigorous strokes in the direction of the heart and of the diaphragm. These strokes are repeated from fifteen to twenty times, and are succeeded by a pause, during which he strikes the chest over the heart repeatedly with the palm of his hand. In favorable cases this method is early successful, and sometimes a twitching of the lids or of the angles of the mouth appears with surprising rapidity at the first sign of returning life. As soon as these symptoms are noted, the simple manipulations above described must be earnestly continued, and persevered in for from half to one hour, for with their cessation the phenomena indicating beginning return of life also cease. Generally the face soon assumes a slight reddish tint, and at the same time a faint pulsation may be felt in the carotids. By this method F. has seen life return to 14 cases, amongst whom were such as had hung themselves, drowned and asphyxiated by carbonic oxide, and in one case by croup. In three cases of asphyxia by coal-gas, and in one case of apparent death by chloroform, the method described alone succeeded. F. advises, therefore, the practising physician not to lose time with other procedures, but at once to employ a method which, in his hands, has proved so universally successful.

In confirmation of the views expressed the following case may be quoted, which was reported by DR. V. BASH. Electricity was applied to revive a drowned woman, apparently asphyxiated, but in whom various symptoms had proved life still to be there. Suddenly the patient became deadly pale, completely lost consciousness, white froth appeared at the mouth, and respiration and the pulse at the wrist ceased. By kneading energetically the abdominal walls, life was brought back. B. had been induced to practice this procedure by the results he obtained from experiments on animals. He had noticed that the passage of the blood into the intestines and other abdominal organs produces weakness of the heart; to this are probably due the sensation of fainting, so often observed immediately before vomiting in some gastric and intestinal disorders, and also the sensation of nausea, which often is the immediate precursor of a fainting-fit; while pressure on the abdominal walls produces fullness of blood in the heart and a revival of the activity of the latter. Electricity in such cases is very dangerous, as the last portion of life remaining in the main organ of circulation may become totally extinct by stimulating a heart empty of blood, and it is surprising to note that its application in fatal chloroform narcosis is still recommended though reported as not preventing death in many cases.—*Med. and Surg. Reporter*, Feb 12, 1887.

THE TREATMENT OF OPIUM-POISONING.—Usually, when a patient is found to be suffering from opium-poisoning, every one present is expected to do something, from the servant who rubs mustard up and down on the feet, to the physician who injects atropia and plies the battery. What with cold water, the exhaustion of unremitting faradism, the injections of atropia, the walking and flagellation, it is quite safe to say that a large proportion of cases would be better off if not discovered at all, and were permitted to present themselves, after a good nap, to their friends.

Perhaps, in the present doubtful status of the question, it would be proper to give such a dose of atropia as under other circumstances would be perfectly safe, but we could not charge one with neglect of duty who might forego it. The rubbing of the feet and hands with mustard can only be of help to the disturbed family as a kind of satisfaction. The lead to the uncovering of the patient, to a certain amount of shock if in cold weather, and in such circumstances a prevention of the elimination of the poison. Flagellation will, in the present state of public sentiment, also do good (to the bystanders); but if we had a patient in whom we felt unusual interest, we should be much pleased to have some friend volunteer to receive it and thus save him from its depressing effects.

We recently met with a case in which the uselessness of this practice was strongly displayed, and which quite upset our views as to the wisdom of such treatment. The patient was in a state of the deepest coma, having taken, as nearly as could be ascertained, about seven grains of morphine.

We had been convinced that the bastinado was the most effectual method of mechanical irritation, and, thinking this a suitable case proceeded to apply it in such a way as might have suggested the idea of a competitive test for promotion in that line before a Turkish civil service commission. It had no more effect than if we had whispered in the patient's ear. The leg might have been amputated without a tremor from the sleeper. This case recovered.

This led to a line of thought which resulted in the conclusion that flagellation is needless before coma comes on; that during the condition of deep coma it is absolutely ineffectual and that when again the patient has passed sufficiently out of the coma to become again sensitive he is, as a rule, out of danger. The practice of compelling the patient to walk about needs no further condemnation; it is already under the ban of science.

The use of electricity may be also misdirected. If the current is applied continually it is apt to result only in harm. If the breathing of the patient be properly timed, and the current applied when the inclination to inspiration is about to assert itself, the battery is a valuable help, but it is not to be used during the time of expiration and rest, for then it can only aid in the exhaustion.

Artificial respiration is the sheet-anchor; and this, too, has to be practiced in a modified way

The favorite Sylvester method does not answer fully in these cases, from the fact that the muscles are so much relaxed that it is difficult to produce an inspiratory effect by lifting the arms. By following expiration, however, with pressure on the chest and abdomen, a larger expiration can be produced, which results in a greater interchange of air.

Large injections of coffee may be given as a non-poisonous stimulant, and as an aid in ridding the system of injurious matters by reason of its absorption and action upon the kidneys.

To sum up, then, we would keep the patient quiet and warm, perhaps inject $\frac{1}{60}$ grain of atropine and no more, hypodermically; inject into the bowels every four hours a quart of strong coffee; keep the room moist, as moist air promotes the elimination of carbonic acid; and finally, with the battery, as already described, and by careful manipulation keep up continuous artificial respiration.—*American Practitioner and News.*

NOTES ON THE USE OF GUAIACUM AS AN EMMENAGOGUE.—In 1873, in the pages of a weekly medical journal, I recorded some results of my use of the resin of guaiacum as an emmenagogue.* I desire to draw notice to this particular employment of the drug again, and to communicate to my brethren my further experience upon the matter. My attention was first attracted to the value of the resin guaiacum as an emmenagogue by an able paper from the pen of Professor Cleland, of Galway, which was published in the Irish Hospital Gazette, in January, 1873, and in which it was pointed out that the drug is of use in some ovarian affections, and more especially as an excitant of menstruation in certain cases of amenorrhœa. I have given guaiacum in a large number of cases of amenorrhœa, with results which, in the main, bear out the observations and conclusions of Dr. Cleland. Making due allowance for the well known *post hoc propter ergo hoc* fallacy in therapeutic inference (a fallacy which peculiarly inheres to conclusions concerning the effects of drugs upon menstruation), my experience in the use of guaiacum as an emmenagogue has led me to regard that drug as a remedy in promoting the menstrual secretion in a large proportion of cases of amenorrhœa. It appears most efficient when given alone in those cases in which the cause of the amenorrhœa is obscure; that is, in those cases in which there is no obvious spanæmic deterioration to which the menstrual deficiency is referable. I give ten grains of the powdered resin of guaiacum, stirred in a wineglassful of milk, every morning, before breakfast. The remedy may thus be given safely for some weeks. In a few instances, I have found it to be necessary to suspend temporarily the administration of the drug, on account of the production of a little abdominal pain and purging.

There is another important therapeutic use of guaiacum which was recorded long ago, and which I have often verified in practice. I mean the curative efficacy of guaiacum in some cases of dysmenorrhœa. As is well recognised in our profession, the causes of painful menstruation are numerous. Each case of dysmenorrhœa requires special investigation, with the view of casual amelioration, on the principle *cessante causâ cessat et effectus.* In this regard I have found the division of these cases into the classes, congestive, neuralgic, and mechanical, as taught by the late DR. TANNER, useful in practice as the lines of therapeutic indication. In those cases of dysmenorrhœa in which we can find no vice producing menstrual obstruction of a mechanical nature, and in which there are no local inflammatory or plethoric signs, the ammoniated tincture of guaiacum is a reliable remedy when given during the painful period. I direct a dose of from half a drachm to a drachm, to be taken in a wineglassful of water, every two or three hours, until the pain is relieved. I owe the knowledge of this excellent remedy to the practice of the late DR. EVANS, of Birmingham. I find the following reference to this employment of guaiacum in the late DR. FREDERIC FARRE'S learned abridgment of DR. PEREIRA'S Materia Medica. —"*In obstructed and painful menstruation*, not arising from any plethoric, inflammatory, or congested state of system, the ammoniated tincture of guaiac has been employed with ad advantage."—SIR JAMES SAWYER, M. D., in *Birmingham Medical Review.*

*British Medical Journal June 7th, 1873.

VASCULAR THERAPEUTICS.—The possibilities of scientific therapeutics are nowhere more clearly apparent than in the treatment of the diseases and functional disturbances of the circulatory system. A critical study of our resources will show that we have at command the means of combating almost all the deviations from normal circulatory function, provided they are not due to too profound a toxic or other cause. We can increase or diminish the force and frequency of the heart's contractions, control the contractility of the arteries, affect the action of some of the local mechanisms, and modify the deleterious or other effects of the central nervous system. That is to say, the circulation of the blood, both local and general, can, within certain limits, be controlled by an intelligent use of the remedies included in our materia medica.

This has been ably illustrated by M. ÉLOY, in a recent article in the Gazette hebdomadaire de médicine et de chirurgie, who calls particular attention to the brilliant results that have been obtained in the treatment of spastic and degenerative arterial disease. He speaks with enthusiasm of what has been *ataxiques* and arthritis deformans, although the former were characterized by a much more rapid development, a nervous influence doubtless bringing about lowered nutrition, and the poorly nourished bones falling ready victims But, inasmuch as a general trophic influence like that occurring in tabes, would necessarily act on all joints alike, there must always be a local exciting cause to set up the disease in a particular joint. The nature of this local cause might be evident, but, taking into account the close connection between syphilis and tabes, the idea might be entertained that the joint affection belonged rather to syphilis than to tabes.

Mention seems not to have been made of the recent researches of French investigators as to the condition of the peripheral nerves in tabes

DEJERINE, PIERRET, and more recently PITRES and VAILLARD have drawn attention to the occurrence of inflammation of the peripheral nerves in the course of this disease. The latter observers attribute the arthropathies of tabes to a non-traumatic inflammation of the peripheral terminations of the nerves supplying the affected joint. A case lately reported by STRUMPELL, an abstract of which was given in this journal, seems to favor this view, as it goes far to show that the peripheral neuritis may occur as a forerunner of tabes dorsalis or in its initial stage—the stage in which the joint affections make their appearance. Observers are not wanting, however, who look upon the neuritis as secondary to the joint affection, which, they say, has its starting-point in a traumatism that, owing to the anæsthesia of the deep structures, may not have been perceived, or may have been overlooked. It is evident that the decision of the question will require further research and experiment. Let the result be what it may, it is of the utmost importance to practitioners to know that a painless articular affection, unaccompanied by fever, may occur as an early or premonitory symptom of tabes dorsalis, and that it too frequently ends in irreparable injury to the joint.—*N. Y. Med. Jour.*, Feb. 5, 1887.

THALLIN IN TYPHOID FEVER.—The introduction of such drugs as "kairin," "antipyrin," and "antifebrin" has somewhat diverted attention from a very powerful antipyretic agent, viz, thallin. PROFESSOR EHRLICH lately presented to the Clinical Society of Berlin the results of some researches he has been making with that last-named agent, especially in the treatment of typhoid fever. (Münch. Med. Woch., No. 47.)

From experiment, he had discovered that after administering the drug to animals it was not retained in the nerve centres, but mostly in the fatty tissue of the body. He also found that there was a marked difference in toxic action, according as to whether it was administered by the mouth or subcutaneously, the greater inertness of its effect in the former case being attributable to the hindrance of absorption from the presence of intestinal contents. The lesions induced by a toxic dose comprised fatty degeneration of the kidneys, necrosis of the salivary glands and pancreas, and hemorrhagic infarcts in the renal pyramids. The chief action of thallin is antipyretic, but it is capable also of moderating inflammation. As regards typhoid fever, it was administered by EHRLICH in two different ways. The first plan consisted in commencing with doses of 0.06 gram every hour, and reducing the dose to the minimum required to give any effect. The other plan was to commence with a minimum dose, and increase it until an effect was produced, and then continue the prescription at the dose thus attained. The action of thallin is especially noticeable in its effects on the sensorium and general condition of the patient, who presents the appearance of convalescence, while the splenic swelling and roseola are still present; and if the drug be discontinued the temperature will rise again. It is not, therefore, surprising to learn that, whereas, of twenty-eight cases treated by bathing, the average stay in hospital was thirty-seven days, of seven cases treated by thallin (minimum doses) the duration of treatment was forty-seven days, and cases on a scale of progressive doses, thirty-eight days. However, PROFESSOR EHRLICH claims advantages for the drug in the absolute control it exerts over the pyrexia, and the sense of well-being enjoyed by the patient. There were no intestinal hemorrhages in these cases and no instance of perforation. The kidneys were not affected, but sequelæ in the form of hyperæmia and œdematous swellings seemed due to the use of the drug. It was not thought that thallin had any specific action against the typhoid bacillus, but it did seem to limit the degree of intestinal ulceration. PROFESSOR EHRLICH considers it to be on a level with the bath treatment. DR. FRANKEL pointed out that if the statement were correct that thallin is not found in the nerve centres, its action in reducing temperature was rather inexplicable. He has exhibited it in increasing doses, but could not say that the patients experienced any special benefit attributable to the diminished fever. DR. GUTTMAN had not been favorably impressed by its use, and had noted the production of rigors.—*London Lancet; Amer. Prac. and News*, Feb. 5, 1887.

ANTISEPTIC HYPODERMATIC INJECTIONS IN BACTERIAN MALADIES.—Many diseases are caused by microbes, and as every microbe has its known microbicide, it becomes necessary to know how to employ the latter in subcutaneous injections. M. MEUNIER believes that he has discovered a medium through which all the microbicides that are not dangerous to the economy may be injected hypodermically without causing either swelling, abscesses, or pain. This medium is pure vaseline (density, 0.820) which dissolves thymol, menthol, the essences of eucalyptus, cubebs, santal, copaiba, mint, and of cinnamon—in a word, all the hydrocarbons whose formula is $C^2\ H^{2n-4}$, and $C^2\ H$; and also carbolic acid, camphor, chloride of camphor, creasote, sulphide of carbon, iodoform in solution in the essences, and even alkaloids such as cocaine, digitaline, etc. Many microbicides, antiseptics, and medicines may, therefore, be employed subcutaneously which are not easily digested and absorbed by the gastro-intestinal tube, and in this way accurate dosing of the active principle may be obtained. The following are the general formulæ which M. MEUNIER proposes to employ in subcutaneous injections:

Essence of eucalyptus . . .	5 parts.
Vaseline, chemically pure (D. 0.820)	20 "

Each Pravaz syringe contains twenty centigrammes of eucalyptol. The mixture should be well shaken, allowed to repose, and filtered through three papers. The solution will then be found to be clear and limpid. Prepare in the same way the solution of the essences whose formula is $C^2\ H^{2n-4}$—that is to say, the essences of cubebs, thyme, santal, copaiba, mint, etc. These essences may be associated, taking care that the proportion of the essence to the vaseline is 1 to 5, in order to avoid pain and swelling.

Eucalyptol	5 parts.
Iodoform	0.25 part.
Vaseline	20 parts.

Dissolve the finely-powdered iodoform in the essence; add the vaseline, agitate, and filter through three papers. Each Pravaz syringeful contains 20 centigrammes of eucalyptol and one centigramme of iodoform.

Sulphide of carbon	1 part.
Vaseline	15 parts.

Clinical observations will indicate the number and the quantity of the injections to be employed in different maladies. M. MEUNIER concludes that, with vaseline as a vehicle, injections of the non-toxic microbicides may be made in the subcutaneous connective tissue, and probably in all the other tissues, without inflammation, reaction, or pain, and thus arrest the evolution of microbes; and that the dose may easily be determined for each tissue according to toleration. In the numerous experiments with these injections, M. MEUNIER met with only one simple inflammatory reaction without suppuration, even with extreme doses. —*Medical News*, Jan. 29, 1887.

ELECTRICITY IN THE TREATMENT OF COLD ABSCESS.—A. D. ROCKWELL, M. D., in a recent letter to the editor of the Med. News, calls attention to the value of electricity in the treatment of cold abscesses. He says:

Given a cold abscess, the persistent application of the faradic current is, according to my experience, quite sure to develop it, and render it fit for opening. The pus once evacuated, the cure soon becomes complete and permanent.

The activity of the suppurative process is influenced more or less by the physiological, chemical, and physical effects that are more especially within the province of galvanism, but it is the mechanical influence of the faradic current that most rapidly tends to hasten suppuration. It is a current of alternation, of to-and-fro motion, of constant closing and breaking. When it passes through the body, even when it produces no appreciable muscular contraction, it acts very much in the same way as gentle tapping, or pounding or rubbing on the tissues; and this gives passive exercise to all the deeper-lying as well as the superficial tissues. We may believe that the molecules of the tissues are agitated by the passage of the current, as the particles of a bar of iron are moved by the influence of magnetization, or as bodies are expanded by heat. The numerous branch currents going to and fro act as so many shuttlecocks, keeping every atom in incessant disturbance. While it is in virtue, in part, of these phenomena that we obtain tonic and restorative effects in ordinarily vitalized tissue, we can readily understand how, when acting on parts where the destructive process has begun, they may act as excitants, and very materially accelerate the breaking down of tissue and the consequent formation of pus. In the cases of this kind that I have treated, the patients were not kept from their usual work during the application of the current, and only a few days after the evacuation of the pus.

In one case an enlargement of the neck had existed for several years, which by surgeons, both here and abroad, had been diagnosticated as a "tumor." At one time the knife was suggested, and at another resolution by electrolysis. The patient coming under my care, a small trocar was introduced, and traces of pus found. Under daily application of the faradic current, continued through several weeks, the swelling greatly enlarged. I then made an incision, evacuating several ounces of pus. The wound healed quickly and kindly, and the so-called tumor, of course, rapidly disappeared.

CORROSIVE SUBLIMATE IN TYPHOID FEVER.—At the present time when the septic fevers are believed to be due to the presence of micro-organisms, it is not surprising that various plans of antiseptic treatment are advanced. The trials and suggestions are in every way praiseworthy, as it is quite possible that we are on the eve of important therapeutic advances in this direction. The problem would be readily solved could we deal with the vital fluids as we can with solutions in the laboratory, but the great difficulty is to find remedies which will neutralize or destroy the specific agents, without, at the same time, acting injuriously upon the tissues of the body.

Typhoid fever seems, in many respects, to be the most suitable disease in which to test antiseptic plans of treatment, and various remedies have been used with, so far, doubtful success. Carbolic acid and iodine, of which we heard so much a few years ago, seem no longer in favor. In the remarkable revival of the use of mercury in acute diseases it is natural that certain of its preparations, which have powerful antiseptic properties, should come into vogue, and we find that in Germany corrosive sublimate is being extensively tried.

GREIFFENBERGER, in Berliner klin. Wochenschrift, 1885, reported forty cases, without a death, under the use of sublimate, and claimed that it rapidly reduced the fever, and improved the general condition. At the Hamburg General Hospital, GLASER has tested the method very fully, and published his observations in Deutsches Archiv f. klin. Med., Bd. xl., the general result being expressed in the title of the communication. *The sublimate treatment appears to be without influence in typhoid.* He denies that in safe cases there can be any question of parasiticide action, as the degree of dilution in the fluids of the body is too great. Twenty-three cases were treated, of which five died. In only four cases did the temperature sink to normal before the nineteenth day; in six cases from the twentieth to the twenty-third, and in eight cases defervescence was still later. The state of the tongue was not affected, the general condition of the patients not materially bettered, and neither the duration of the disease nor the tendency to relapse in any way influenced. The paper is accompanied by elaborate tables, illustrating the daily progress of the cases.—*Weekly Medical News.*

REFORM IN TREATING WOMB DISEASE.—The Va. Med. Monthly in commenting editorially on a paper read by DR. THOMAS ADDIS EMMET before the obstetric section of the late session of the British Medical Association, says:

"In making this prominent mention of Mr. Emmet's paper, we wish to emphasize particularly the following points he brings out, which find confirmation in almost every-day experience, and which ought to leave a lasting impression upon the minds of general practitioners:

1. The rare occurrence of most of the uterine displacements and non-puerperal womb diseases as prime causes of the so-called 'diseases of women.'

2. The common dependence of uterine diseases and displacements, leucorrhœa, etc., upon morbid conditions outside the womb as a centre.

3. The unimportance of uterine versions, stenosis, cervical erosions, etc., as pathological states.

4. Hence the discouraging results secured by dependence upon the repositor, sound, dilator, local applications of iodine, etc.

5. Dependence must be put upon the treatment of the conditions outside the womb which cause these "womb diseases."

Dr. Emmet's allusion to the proper use of the pessary is valuable instruction to many. His siatement that he has not so much as owned a sound for many months will "take the feather out of the cap" of some who boast of its utility. His better results since he adopted his present plan of procedure will be information that will be gratifying to all who are seeking the cure of female diseases.

Artificial Alimentation—Dr. George Dalton Hays concludes a recent article on artificial alimentation published in the N. Y. Med. Jnl., Jan. 29th, 1887, as follows:

1. Many pathological processes arise from an improper dietary, and many others may be controlled by a proper dietary. There is a celebrated proposition by M Broussais: "He who does not know how to manage the stomach will never know how to treat disease."

2. Malassimilation is a cause of disease. Peptones in the general circulation being poisons, when from any cause metabolism is interrupted, the system is prone to take on pathological conditions.

3. In pyrexia: *A.* The digestive juices, being less in quantity and impaired in quality, should be re-enforced by the artificial digestive ferments.

B. The stomach is feeble in a muscular sense, and incapable of dealing with large quantities. Hence concentrated or predigested foods should be furnished it.

C. The process is one of tissue-destruction (histolytic). Hence we must furnish the materials for repair (histolysis). How and when to furnish these is still a disputed question.

D. Feeding is not the cause of pyrexia, nor starvation its cure. Though the former augments it and the latter decreases it, we gain most by keeping up nutrition.

E. The excess of urea excreted is not proof of nitrogenous waste in the blood.

A Possible Danger Attending the Use of Pure Terebene.—J. H., aged 56, a chronic asthmatic, suffered from the beginning of December with severe bronchitis, with profuse muco-purulent expectoration. On December 21st he began to take pure terebene (ten drops on sugar, every four hours), with great advantage, the expectoration diminishing to *nil*, and the dyspnœa being much relieved. After the treatment had been continued for three days, the patient was seized with intense pain in the region of the left kidney, shooting into the pelvis and down the left thigh, with blood in the urine, and severe strangury. Cessation of the terebene treatment, together with the use of poultices, and the administration of opium internally, resulted in speedy relief, and left little doubt that the condition was one of intense renal congestion, caused by the terebene. —Alfred Harvey, M. B., in *Brit. Med. Jour.*, Jan. 29, 1887.

Cocaine combined with Lanolin, for Burns and Scalds of the Second Degree.—

℞ Cocaini mur. 2 parts.
Aq. destill.
Lanolini aa. 17 parts.
Cetacei, 4 parts.

forms a grateful and cooling application, the water being absorbed by the lanolin.

Pruritis ani when due to eczema, erythema, and herpes, will not only be relieved but usually removed, by the following ointment:—

℞ Cocaini mur. 1 part.
Bism. Subnit. 2 parts.
Lanolini, 20 parts.

—Ernest Wende, M. D., in the *Buffalo Med. Press.*

Cocaine in Mercurial Stomatitis,—Dr. M. Bœkert has found the solution of hydrochlorate of cocaine in 5 per-cent. and 10 per cent. strength of great service in this affection. It is to be applied to the gums with a camel's hair brush about five minutes before each meal, and will enable the patient to chew his food without pain. In some very bad cases it may be necessary to use a 20 per-cent. solution ten minutes before meal times, and repeat it in five minutes. He directs that the brush be always disinfected with carbolic acid after use, as the bacteria from the mouth, adhering to the brush very soon spoil the cocaine solution.

An Injection for Fœtid Leucorrhœa.—The "Union Médicale" gives the following formula:

Potassium Chlorate, 13 parts;
Wine of Opium, 10 parts;
Tar Water, 300 parts;

Two or three tablespoonfuls are to be added to a quart of warm water as a vaginal injection and lotion.—*N. Y. Med. Journal.*

The Medical Age.

Vol. V. DETROIT, MAR. 25, 1887. No. 6.

Original Articles.

UNWRITTEN MEDICINE AND MEDICAL SOCIETIES.*

BY D. C. HOLLEY, M. D., GRAND RAPIDS, MICH.

The thought which I wish to present for your consideration this evening, may be designated unwritten medicine.

Paradoxical as it may appear, we write about that which, from the intrinsic essence of its very nature, cannot be written. There is something in medicine for which you may search as for hidden treasures, the ponderous tomes of ancient and modern medical literature, in vain; you will not find it in any of your libraries, however well selected or extensive they may be; it is not there. The thought quoted by HARTSHORNE from the Lyons Hospital practice, is very apposite to our theme. "The highest skill in physical diagnosis, and the most profound knowledge of pathological anatomy, will leave you but very imperfect and unsafe practitioners, incapable of clear judgment and self-reliance in difficult cases, in which you have to rest on your own responsibility—if you do not from the first, endeavor to master and acquire for yourselves that unwritten and indescribable knowledge, which constitutes the consummate skill of the experienced medical man.

This knowledge, be it always remembered, is the fruit of a ripe experience; the resultant, so to speak, of years of arduous professional toil; the *tactus eruditus* of the fathers in medicine; that which comes to each because he has toiled and suffered. We call it 'experience,' but what is it? By long practice, and careful observation, physicians and surgeons acquire something which is very difficult for them to impart to others; we call it skill, or a happy power of *a priori* reasoning"—this same unwritten medicine about which we are trying to talk to-night.

The sum total of this unwritten medicine is very large; the various themes might be said to come to us not like angels' visits "few and far between," but we all know there is a vast unwritten medical knowledge to-day existing in the medical profession, which, like a sealed book, we may not read. Comparatively few physicians who, to-day, are actively engaged in practice, ever commit their thoughts or professional experience to writing, or who even express them orally in medical societies or academies, and too many, alas! how many! every year are passing to the *beyond* with brilliant minds thoroughly trained and cultured in their chosen art, richly freighted in medical lore, with a ripe clinical experience.

In our art there are no professional secrets; yet how much annually disappears in the shape of really valuable medical experience and medical knowledge, by the sad inroads into our ranks, of the "fell destroyer". Perhaps nowhere else may it more truthfully be said "no man liveth unto himself, and no man dieth unto himself".

I am quite sure you will bear me out in the assertion, when I say that in this age in which we live, almost daily Death is taking from our ranks medical men, whose attainments and knowledge in all that pertains to medicine and surgery, far exceeded that of HIPPOCRATES or AVICENNA; yet they die and leave no sign to show the coming man of the healing art that they once lived and adorned their profession.

In this, our day and age of the world, writing medical books is almost a trade by itself; more, I sometimes fear, in the hands of our great book publishers than of physicians. Medical books, like other publications, are made to sell; too often they are the result of some visionary mind which has exhausted its powers in theory and compilation. Perhaps it is too true that if one-half of the books now on our shelves were swept by the besom of destruction into some vast bonfire, it would be a holocaust worthy of these last years of the nineteenth century.

What the age demands is the knowledge of what men know; not theory. Tell us what you know, not your opinion, as the lawyers puts it; this is the need of the hour in medicine. More of the *crême de la crême* of unwritten medicine, and less of theory and speculation.

I presume long ere this you are ready to ask, how shall we attain, or obtain and utilize this unwritten medical art. I can only offer suggestions; the combined wisdom of the medical profession must solve the problem. We live in an age of organization; it would seem that nothing can be accomplished outside of an organized effort. The church, which has ever been the beacon-light of the world's salvation, has been steadily marching down the centuries in solid

*An address delivered before the Grand Rapids Academy of Medicine, at its annual meeting Feb. 8, 1887, by the retiring president.

organization, ever seeking to prepare the way for the coming "thousand years." Politicians have learned fully, that a successful campaign can be prosecuted only as they are thoroughly organized for the work, and all wire-pulling must be manipulated by the body politic in its corporate capacity. Scientist and physicist, philosopher and humanitarian, have long since completed their organization, whose work in their respective fields of labor is to-day well-nigh perfect. We have trades' unions, Knights of Labor, and all sorts of unions. Medicine alone seems to linger in the race; and, perhaps, it is to be feared, the old maxim in her case will come true, "the devil take the hindmost."

But a truce to all this; in our profession there are ability, talent, learning, second to no other profession on earth. "The fault, dear Brutus, is not in our stars, but in ourselves, that we are underlings."

Says Dr. Barnes, of London (himself one of the most brilliant medical scholars of the day): "The object of a medical society, academy, organization, call it by what name we please, is first to gather together, and then to diffuse knowledge. Individually, we may be, and usually are, all workers in our respective fields of labor, earnestly endeavoring to combat disease and death as it comes to us in its protean forms, but individual effort alone, unaided by others, is like a man going a warfare at his own expense." The work accomplished will be so insignificantly small that it will count as nothing; whereas, when joined to the same or similar labors of many others, the aggregate becomes simply immense.

Professionally, how may we best join our forces to reach a goal so consummately to be wished for? If an end so desirable is ever reached, every man clothed in the habiliments of a physician, in addition to keeping himself thoroughly posted in the science of medicine, must be willing to be an active worker in some medical society, academy of medicine, or medical organization of some kind; even if to accomplish it, some self-abnegation has to enter into the composition of his every day life.

It is true, medicine has been gathering from the experience of the ages all along the steps of time, and to-day has in her archives untold treasures of truth and knowledge; yet upon her escutcheon you may still see the device, "Excelsior."

Utilia Fideliter Excerpendum has ever been the motto of rational medicine, and the deep-voiced undertone of true medicine all along the march of the centuries, from the time when the "morning stars sang together" till to-day, has been "what is truth?" She has ever sought to gather the good into her garners, and to cast the bad away.

Permit me to instance a single case where a golden grain of truth was cast into the treasury of medical truth by one whose very name even is lost—but the fruit of whose rich experience was gathered in and is ours to-day. While the late Dr. Robert Graves was in charge of Meath Hospital, Dublin, he received a visit from an Irish country physician. Dr. Graves very politely took pains to show his visitor the numerous fever wards of that magnificent institution. The visitor said nothing, but observed closely. The wards of the hospital at the time were crowded with typhoid-fever cases. The visit over, the country physician in taking his leave of Dr. Graves, smiling made one remark. "Doctor, I would advise you not to let your patients starve to death." and he was gone. That remark has almost revolutionized the treatment of enteric fever.

Associated medical talent is the only way we may reach forth and touch this almost forbidden fruit, unwritten medicine. Further, there are special reasons why the medical profession should enjoy the full benefit of associated talent, and feel the influence of a liberal and earnest consideration of the various topics which must claim the attention of the physician. The time in which we live demands an enlightened and catholic spirit pervading the whole professional body, so that the improvement in the science and art of medicine shall correspond with the progress of our race in all that is great and good and worthy of the closing years of the nineteenth century. Thus shall we enlarge the estimate of the work in which we are engaged, and make it appear, as it truly is, worthy of the time and entire energy of the most highly-gifted minds. Properly considered, no pursuit has a more direct and powerful tendency to call forth the mental powers, and task them to the utmost of their capacities.

Comprising as the knowledge and practice of medicine do, both science and art, it is highly important that there be a union and concentration of the various talents within the precincts of the profession. This can be done in no other way so well as by the combination of those who may be led by their different tastes, or habits, or indications of duty, to pursue one or another of these branches of medicine with more zeal and earnestness. One man may have had his mind directed to a particular subject, to which his peculiar mental constitution is especially adapted, and often having dwelt upon it with assiduity for years, accumulated facts and made generalizations, he can in one hour communicate the result of all this labor to the assembled members of an academy or society, thus saving time and labor for each member equal to that which it has cost him. Thus are brought into the common stock the gatherings of each, and not only is the sum-total made larger, but a common interest is imparted, and a truer sympathy is awakened among all who

arrive at the same grand result. The effect, too, upon personal character of a well-regulated, well-attended medical association, or academy of medicine, is not to be overlooked,

> "For, ground in yonder social mill
> We rub each other's angles down."

But the greatest inducement which can be held out to the medical profession to unite in an association or academy of medicine. is the improvement of its members in the knowledge of medicine; by calling out from time to time unwritten medicine as it is possessed by each, by every one who has honestly and truly been admitted legitimately to practice the healing art. Giving and receiving instruction is, in fact, the duty of every true son of Æsculapius.

In an Academy of Medicine, like this, if we would do the most good we may, we must all be workers—punctual in our attendance at all society meetings. The forcible remark of the venerable DR. BATCHELDER in his inaugural address to the Academy of Medicine, of New York, is equally applicable to us in Grand Rapids. He says: "The duty which immediately grows out of fellowship, is that of attending punctually all the meetings of the academy. If one stays away without adequate reason, another, and indeed all, may do the same. And it is furthermore, at least an implied duty, that every one should be on the *qui vive* for facts which relate to the science or practice of the healing art. These he is bound to gather up and bring into the Academy for the good of all." If this is true of New York it will fit us in Grand Rapids equally. It is true, a degree of effort is necessary, and some sacrifice unavoidable. As the long-continued gentle exercise of any one of the senses, like that of watching the graceful undulatory motion of a field of grain, or listening to the murmur of streams, or the humming of bees, produces sleep, so does the undisturbed routine of professional duties induce intellectual somnolence in him who plods his daily round, unthoughtful of all besides the few familiar faces or objects and scenes which pass monotonously before him. He needs the stimulus of collision with those who have taken different or even similar views with himself, upon subjects which they have separately studied, to awaken him from his aimless day-dreams. And in this friction with other minds, scintillations may be struck off which will kindle ideas and give food for afterthought. As by attrition the rough edges of the hardest material will be made smooth, so will differences of opinion be modified and asperities of feeling be softened by frequent intercourse.

The more thoroughly men become acquainted, the more will they respect the sentiments of each other, and most persons will be found to possess good qualities which we shall learn to appreciate, while we may be lenient with regard to their failings. Rivalry among members of the same profession is a useful stimulus to effort, if it be confined within the limits of honor and justice.

Thus, gentlemen, have I endeavored to draw your attention to the theme of unwritten medicine. I am aware of the magnitude of my subject, of the impossibility, in a short address, of doing more than merely to suggest the subject and leave to your own fertile minds to fill out the vast unwritten blanks—each in his own way.

As I have held up to your view, or endeavored so to do, your duty, I am well aware of my own derelictions and short-comings in this plain path. Bodily infirmity and untoward circumstances are my only apology. That my failures will be more than made up by my worthy successor in office, I sincerely trust, and in closing, I shall adopt the language of the classical SIR THOMAS WATSON. "But amid all its responsibilities, the profession we have chosen, or which circumstances have prescribed to us, is a noble profession and worthy the devotion of a lifetime. Trials, no doubt, belong to it, and difficulties; but it has also privileges and immunities peculiar to itself. Affording ample scope and exercise for the intellect, it is conversant with objects which tend to elevate the thoughts, to chasten the feelings, and to touch the heart. The sad varieties of human pain and weakness with which our daily vocation is familiar, should rebuke our pride, while they quicken our charity. To us are entrusted in more than ordinary measure, opportunities of doing good, of showing love toward our neighbor. Let us beware how we idly neglect, or selfishly abuse a stewardship so precious, yet so weighty.

Familiar with death in its manifold shapes, witnessing from day to day its sudden stroke, or its slow but open siege, its secret and insidious approaches, we are not permitted to be unmindful that our own stay is also brief and uncertain, our opportunity precarious, and our time even when longest, very short, if measured by our moral wants and intellectual cravings."

CREMATION AMONG THE TLINKETS.

BY ZINA PITCHER, M. D., SITKA, ALASKA.

The acccount of the origin of "Cremation among the Tlinkets is so inseperably interwoven with their early history of man, that to describe the former without touching lightly upon the latter would deprive the tale of much of its charm. To gain an insight into their beliefs is by no means an easy matter. It is not to be had merely for the asking. One must possess the confidence and friendship of some intelligent indian, for like their white brethren, they vary in intellect and ability to compre-

hend and retain the many different legends handed down from generation to generation.

Unlike many people similarly situated they possess no mechanical medium of transmitting facts,—as for example the Peruvians, who by means of different colored skeins or threads variously knotted, refreshed their flagging memories. Hence the requirement of a superior memory. Again, as my knowledge of the native dialect was hardly sufficient to permit of the unraveling of the mystery unaided, I was compelled to trust to a Russian interpreter whose English was as indifferent as my Tlinket. Taking all this into consideration, it is fair to presume that any inaccuracies will be readily pardoned. People visiting these shores and remaining here long enough to gain any knowledge whatever of this curious people are struck with the great reverence paid the crow. Never was "the sacred Ibis" of the Egyptians more secure from harm, so far as the natives are concerned, than this chief of scavengers. The reason for this is apparent when it is stated that the Crow is the native Deity. He who created the world and all that therein is, from grass and earth made he man and woman, calling the man "Seatth" and the woman "Taatse-et-taatth. From this couple sprang all mankind. For many years peace and harmony prevailed, but upon one of their canoe journeys a quarrel ensued over the unusual size of the load, which resulted in the bulk of it finding a resting place in the deep, the exception being a number of boxes of curious design, which after being tossed about for many days stranded on different portions of the coast and were transformed to stone by the Crow. Remarkable resemblances are pointed out to-day, by the credulous Siwash, as positive proofs of the correctness of his story. This quarrel was the beginning of strife and death in the world. Upon the return of "Seatth" and wife he commanded his numerous family to separate, sending them in two's and three's to different points, giving them instructions to take to themselves as husband or wife, as the case might necessitate, the bear and the seal, etc. This latter command disposes of a question, hitherto a deep mystery, viz.—as to where the early man and woman found a helpmeet. These instructions being given, death ordained him for a victim. Being at a loss as to how to dispose of the body they appealed to the Deity, who directed them to bury it in a decorated box, this box in turn to be placed in a hut raised a few feet from the earth and built upon an elevated portion of ground. This custom prevailed until the death of "Kaket" a "great tyee" who upon the second day after the burial came to life and released himself from his cramped quarters. Being in a decidedly uncanny state, he hid himself. Upon the day following, his widow and friends coming to mourn at his resting place, were horrified to find it, as they supposed, despoiled by bears While giving vent to their grief at the discovery, the deceased sprang up and exclaimed "here am I!" The mourners appalled at the frightful apparition, fled; for his eyes were as big as saucers and like balls of fire; the mouth and chin gone, and from his nostrils came a terrible stench. They returned, however, but not until he had bettered his condition somewhat by a bath at a neighboring body of water. A canoe was made ready and he was taken home, upon reaching there he related his experience and counselled them to forever after cremate their dead, giving as his reasons the following: Those who were buried rested cold and uncomfortable, also experiencing hunger and thirst; while those that were burned rested warm and comfortable, warming themselves in the presence of a genial blaze, and experiencing in case food were also burned and water placed near in an excavation neither hunger nor thirst. This man was allowed by the Deity to live provided his wife waked him at the first crow-call in the morn. This she successfully accomplished for a year, watching by his side while he slumbered; lest she fail, when wearied with this constant vigil she fell asleep, the crow-call sounded, the moment passed unheeded and "Kaket" slept to rise no more. So much for the origin of cremation.

As regards the ceremony it would be as well, perhaps, to start with the death of an individual. Preparations are not always delayed until after the death. Such minor details as arraying the body in its cremation costume and oiling the face, are generally attended to before that important event. This I have witnessed in many instances but, as was remarked in a previous article, a decoction is administered in those cases pronounced necessarily fatal by "a medicine man," which not only hastens death but renders unconscious the partaker. This statement, in a measure, dissipates the idea of lack of sympathy gained upon reading the above. The crematives costume consists, in the great majority of cases, of a beaded blanket, dress or breeches, moccasins, a pair of white gloves, over which are drawn a pair of mits, and a huge knife placed in the right hand. Each of the four last-named articles has a particular object beyond that of mere decoration, which is explained as follows: As a man dies, he hears a loud roaring of water, which is believed to be the sound of falling trees; this lasts a moment, and he comes back to find himself on a trail which will lead him to his friends; in following this he will cross many rugged rocks and places overgrown with "devil's cane," which lacerates his flesh, hence the moccasins, gloves and mits. The knife is given him to successfully combat phantoms and evil spirits, which appear as bear and other wild animals. Death having taken

place, the body is propped up in a sitting position and the whole affair covered by a blanket. Immediately in front of the corpse, curled upon the floor, completely enveloped in a blanket, lies the husband, or wife, as the case may be, neither eating or drinkng, thus giving substantial evidence of his or her great grief. The day following the demise, is the one generally set for the cremation. Upon the arrival of the hour for the ceremony, the body is lifted in a blanket and passed out through a window to five or six men, hired to act as pall-bearers and attendants generally. In case no window is handy, a hole must be cut for the purpose, or the body hoisted out through the huge open chimney that adorns each hut, as no dead are under any circumstances to go out by the door. Upon the exit of the body, the oldest hag present hurls through the aperture a shovel-full of cakes and a young dog. This is done in order that a long time may elapse ere sickness again enter the family. The dog is supposed to carry away any remaining ailment that may yet be lurking about. Now that the body has left the house, the relatives and friends become passive spectators. Men hired for the occasion attend to all matters appertaining to the burning. No singing or lamentation is allowed until the fire is kindled. Upon reaching the ground, the body is placed on a grating of cedar rails, raised a foot from the ground; over it is piled kindling of the same; a hut of logs is then built, enclosing the whole, and the torch applied. As the first crackle of the flames strikes upon the ear of the hitherto silent mourners, they give way to their grief in sobs and tears. Two of the hired band station themselves by the burning mass with long poles, with which they constantly stir the blazing logs and turn over the body of the victim. Once in a while, as the poles are withdrawn, fragments of charred flesh are seen clinging to them; these are immediately seized upon as remembrances and carefully cared for. The men not engaged as firemen range themselves in a row parallel to the fire, at a distance of perhaps twenty feet, and chant a funeral dirge, keeping time with poles, held perpendicularly in front of them, by raising and planting the lower end. The rapidity of this motion is governed by the degree of feeling exhibited. At times the song raises to a wail, dying away again to an almost inaudible murmur. It is evidently a set piece of music, as perfect harmony is preserved throughout. As soon as all indications point to the fact the body has been consumed, food is placed upon the fire and water in an excavation near by. If this is not attended to the burned person will find the gates to his paradise closed. When it is observed, upon his arrival there he finds the little burned magnified to an immense store sufficient to supply him forever. He joins the heavenly band, and passes his time in feasting and dancing, with no thoughts of his family and friends, as yet inhabitants of this mundane sphere. Upon the consumption of the food, the fire is raked over, the charred fragments of bones carefully collected, put into a box properly decorated and deposited in a hut, which is described in the opening of this article. This done all their recent grief disappears as if by magic, and they disperse to their several homes. One who witnesses this scene for the first time can not but be struck with the order and decency displayed, and the absence of all such barbaric doings as the civilized mind naturally associates with such a ceremony. It is seldom that the amount of feeling exhibited equals that shown at many a funeral gathering among the lower classes in the States. On the whole, it is an exceedingly decent and well-conducted affair.

THE OPHTHALMOSCOPE—ITS ORIGIN AND USE AS AN AID IN DIAGNOSIS

BY DR. SAMUEL BELL, PORT HOPE, MICH.

The venerable DR. HOLMES, in his advice to a young physician, said: "Be practical—not a mere theorist." The successful physician is, as a rule, the practical one. A critical analytical description of the practical physician is not, however, the purport of this paper. The profession is so crowded in city, town and country that the physician of to-day who has to depend upon the result of his own efforts for a livelihood and a competence for his declining years, and meet all the other demands which necessarily fall upon him, and rises above the mediocre in his chosen profession, must develop into something more than a mere routinist or theorist. In medicine, as in many other professions, specialism is on the increase. And as a consequence of special line of study greater talent is developed in that particular direction. Great talent seeks the metropolis or other great business centres. The rural practitioner who may live many hundred miles from a city, must meet many emergencies, without the aid of a specialist. The microscope, ophthalmoscope, laryngoscope, spectroscope, materially aid the eye. We augment the sense of hearing by the use of the stethoscope, trace the pulse with the sphygmograph, take the temperature with the thermometer, and determine muscular conduction by the galvanic current. Many of us have listened to the best medical talent on this side of the Atlantic, with admiration and unlimited pleasure, and many of your readers have been delighted with the eloquent teachings of VIRCHOW, COHNHEIM, JENNER, BILROTH, and a host of other trans-atlantic peers in the profession. Yet the practical physician brought face to face with disease, in all its forms, and in many cases enveloped in obscurity, will find it absolutely necessary, ever and

anon, to call into requisition the inventions of modern science. The hard-working student passes out from his Alma Mater, brimful of science and without half enough of practical training. In the writer's opinion, more importance should be given to the education of the student's five senses. The superiority which one physician attains over another, in the successful treatment of disease, is not so much on account of his knowledge of the dead languages, or of the higher mathematics (although the acquisition of the same is not to be condemned) as to an educated touch, keen ocular observation, and a well-trained ear. A great clinician contributes largely from the storehouse of his experience, and observation, and if we ask him from whence he derived his knowledge of diseased conditions, he will point to the laboratory, the microscope, ophthalmoscope, analysis of blood, tissues, urine, etc.

One of the most useful instruments given to us, during the last half century, is the ophthalmoscope; although relegated largely into the hands of the specialist, its requisition and application by the general practitioner would aid him in arriving at a correct and precise diagnosis. HELMHOLTZ' attention was called to the color of the pupil, a question being raised why it was always black, (save under exceptional conditions). Upon this subject he concentrated his close observations and rare aptitude for physics. He not only revealed the true condition, but invented a mirror, which made it possible to see the fundus of the eye. Still further pursuing the subject of physiological optics, he finally gave us one of the most complete treatises in existence. PROF. VON GRAEFE with this instrument began his studies in clinical ophthalmology and achieved the most brilliant results. The correct and scientific employment of spectacles is due, almost entirely to the labors of DONDERS. About the same time and from the same stimulus he began the study of refraction and accomodation of the eye. To the above trio will remain the honor of first giving to the medical world, the fundamental principles of optics. The three chief methods of examining the fundus oculi, are: 1. The direct method; 2. The indirect method; 3. Retinoscopy, or the shadow test. For a minute information and proper directions, the student is referred to the textbooks on ophthalmoscopy.

To M. BOUCHUT is given the credit of first calling the attention of the profession in general to the use of the ophthalmoscope in brain diseases. The eye is so closely connected with the nervous system in general, and the brain in particular, both anatomically and physiologically, that very often in morbid conditions of the brain and meninges (with or without diseased conditions of the whole nervous system) an ophthalmoscopic examination of the fundus oculi will add the missing link to what would otherwise be a doubtful diagnosis. In interstitial nephritis, one of the most prominent systems is sudden diminution of sight. The ophthalmoscopic appearances in albuminuric retinitis has often led to a correct diagnosis, when the patient had previously been treated for dyspepsia, colic, biliousness and headache. In this form of Bright's disease albuminous depositions are not constant, dropsical effusions are not always present; hence the diagnosis is rendered obscure. I have had under my care during the last four months, an old gentleman who had previously enjoyed good health. His appetite became capricious, memory treacherous; mental depression and dimness of vision followed. Frequent urination and increase in quantity; no œdema present. Diabetes was suspected, and appropriate urinary tests made with negative results. Two examinations for albumen were then made with the same result. The diagnosis still being very obscure, an ophthalmoscopic examination of the fundus oculi was made, which revealed the true condition. Subsequent urinary analysis and microscopic examination developed cortical degeneration. In this disease the following changes take place in the retina: 1st, a general haze of a dim grayish tint in the central part of the retina, and very frequently retinal hemorrhage; 2d, the second stage, the sight becomes impaired, and we find a number of white dots or patches in the hazy region; when these are few, they are generally found near the yellow spot, and are of a peculiar white, opaque color. Hemorrhages are generally present, and constitute the most marked feature of the case.

HENRY JULER, F.R.C.S., of London, in one of his admirable lectures on the ophthalmoscope as an aid to diagnosis, relates from his experience the case of a medical man of active habits and literary tastes, who consulted him upon a matter which had been to him a source of greatest anxiety. His left eye had become useless, and he had been told by competent authority that it would not improve. His right eye was also becoming so dim that he could not read by night and very little by day. He was given to understand that tobacco was the cause of the condition, and consequently relinquished its use; he also suffered from headaches. From the history as given by the patient, DR. JULER thought he had a serious case to deal with. The ophthalmoscopic condition of the left eye, the worst one, revealed hypermetropia of thin dioptrics, and the optic disk somewhat congested. The right eye was also hypermetropic, although of a less degree, and the disk also hyperæmic. Correcting glasses were adjusted and vision restored, and the man sent away happy with the assurance that he had no tobacco amaurosis.

This, says PROF. JULER, is another case shirked by the practitioner, or altogether misunderstood. He also states that he has known of ametropes who have been advised to desist from all study, change their vocation in life, and go abroad in search of recreation, when all that is required on the part of the practitioner is a glimpse with the ophthalmoscope.

DR. HUGHLINGS JACKSON, in a discussion before the Ophthalmological Society of London, in 1881, said in reference to optic neuritis: "Your health goes for nothing in our estimation of the gravity of the situation. We all have seen healthy-looking children and adults who have double optic neuritis with good sight, who are supposed by those who do not use the ophthalmoscope to have no intracranial disease at all."

MR. HUTCHINSON wrote: "The routine use of this instrument would save us from many errors. No one would make the diagnosis of hysteria or liver disease only, if he saw by looking at the disk optic neuritis."

The want of space and time prevents me from following the subject any farther at present.

A CASE OF DOUBLE HARE-LIP.

BY DANIEL LA FERTÉ, M. D., PROF. ORTHOPŒDIC SURGERY AND CLINICAL SURGERY, DETROIT COLLEGE OF MEDICINE.

It falls to the lot of every medical man to meet with deformities of various kinds. When they involve some exposed portions of the human frame it is but natural that the surgeon summon all the ingenuity at his command for their removal. The resultant scar, if this is unavoidable, is to be borne in mind. He plans his incisions and he removes certain portions, and in such a manner that as little trace as possible of the original trouble may be left. In fact he endeavors to accomplish as nearly as practicable what nature would have done if the process had gone on uninterruptedly.

Within the range of malformations about the face, there are few which are more mortifying to the parents, few which give to the features a more hideous look, than a well developed case of hare-lip. If it is a case of the double variety, with a fissure through the alveolar border of the superior maxillary bone; possibly a fissure corresponding to each fissure in the soft structures and, consequently, not infrequently a well-marked protrusion of the intermaxillary bone, we have then before us truly an object of pity. In a case of this sort a well-planned and well-executed operation, and one terminating favorably in its results, will be certain to win for the surgeon the everlasting gratitude of the parents.

Parents are not always easily persuaded to allow their infant to be subjected to so severe an operation as one required when some of the complications mentioned above exist; within the range of their acquaintance they know of some case that was very little benefited by the operation. They have possibly heard of another case that was made worse, and possibly of another that resulted fatally. The latter mishap cannot always be avoided, for when the bone is fissured the operation is necessarily a severe one, entailing a great shock to the system.

There seems, however, to be very little excuse for not greatly improving or entirely curing a case of this kind. The operation is an easy one. but, nevertheless, it requires a certain amount of nicety of judgment for its proper execution and successful termination.

We have all been taught that a very frequent cause, if not the prime factor in an unsuccessful

FIG. 1.

case, is the want of a sufficiently extensive dissection of the soft parts from the superior maxillary bone. This part of the operation is, however, sometimes deceiving. We find this especially the case if we attempt to make an extensive dissection of the nose corresponding to the depressed side in a case of fissure of the alveolar border of the jaw when one part overrides the other. An extensive dissection here will certainly add to the deformity of the nose. This I have learned by actual experience in my anxiety to make certain that I made my dissection sufficiently extensive.

By the exercise of a little tact and judgment we obtain results in these cases as gratifying as any in plastic surgery.

Among others I select from my note-book the case of a little child, three months old, which was brought to me from Canada. It was a case of double hare-lip, with a fissure through the whole of the alveolar border of the jaw corresponding to the fissure on the left side. There was severe advance of the right side of the bony

cleft in front of that of the left side, and well-marked depression of the left wing of the nose (Figure 1.) The parents readily consenting to an operation, the little one was placed under an anæsthetic. The little island under the nose was pared all around its circumference. A piece of soft leather was then placed over the projecting alveolar process, to avoid bruising, and by means of firm pressure with the handle of an instrument, it was fractured and forced backwards into as perfect coaptation as practicable with the other side of the fissure. No sutures were used here as the fragment manifested no tendency to displacement. I felt safe then in trusting to the pressure which the sutured lip would exert upon it to have it retain its place. The next step of the operation was to split the soft parts corresponding to the left fissure, and make a flap along the margin of the right fissure, in other words following Colles' method, which is familiar to all surgeons.

FIG. 2.

The little flap on the right side was stitched partly to the lower part of the little island under the nose, and partly planted into the slit made on the left side. Finally the raw edges of the clefts were stitched to the sides of the little island above mentioned, which completed the operation. The parts were supported by means of adhesive plaster, which was removed every two or three days. At the end of the twelfth day all sutures were removed and complete healing had taken place.

At the end of the third week the mother being very anxious to return home, I had the little one photographed. His appearance at that time is shown in figure 2. It will be seen by that plate that the scars are yet quite visible. Three months after the operation the mother brought the little patient to my office and at that time scarcely any scar was to be seen, even the little dimple in the centre of the lower border of the upper lip having disappeared.

COCAINE DOSAGE AND COCAINE ADDICTION.*

BY J. B. MATTISON, M. D., BROOKLYN, N. Y.

The sad story, in a recent Record, of the Russian surgeon's suicide from sorrow or remorse due to his belief that a patient had died from an overdose of cocaine, points a moral, the import of which demands more than a passing notice.

No advent in the therapeutic arena during the last decade, has been attended with such varied and extensive claims for favor as cocaine. Its marvelous effect in ophthalmic surgery roused a spirit of experimental research in other directions which has added largely to its well-proven power for good; but, as has been well observed, a potency for good implies a potency for harm, and the risk impends of its ardent advocates being carried by over-enthusiasm, beyond the limit of a safe regard for the welfare of their patients or themselves, that may imperil an otherwise well-founded success.

Surely it is, in the writer's opinion, full time to draw the line; to re-voice a warning as to the use and abuse of this valued, but, at times, toxic drug, lest the roll of alarming, dangerous and fatal effects from its ignorant or incautious using be sadly extended, and a reaction ensue that, by creating distrust within and without the profession, will damage its good repute, and hinder its use in cases where it would be almost certain of serving us well. And the need of this seems all the more called for in view of opinions expressed, the past year, in certain quarters, affirming the harmless character of cocaine—opinions which, I am convinced, are at variance with well-accredited facts, and should not be allowed to pass uncontradicted.

Cocaine seems to have secured for itself a more than usual share of attention aside from the professional press. One metropolitan daily, in particular, has, again and again, given its columns to a discussion of the topic, and in a somewhat lengthy article not long ago, an "eminent but unnamed specialist"—DR. FRANCKE H. BOSWORTH—was reported as saying "there is not a well-authenticated case on record, as yet, where cocaine has effected injury."

In view of cases cited in this paper, and others elsewhere recorded, such a statement is no longer tenable, and any conclusion based thereon as to the harmless nature of cocaine is misleading and incorrect.

And the evidence herewith presented weighs even more heavily against an assertion by DR. WM. A. HAMMOND, at a recent meeting of the New York Neurological Society, in the

* Read before the Kings County Med. Soc. Feb. 15, 1887.

course of his "Remarks on Cocaine and the so-called Cocaine Habit," when, after telling of his taking of eighteen grains at a subcutaneous dose, he asserted "he did not believe any dose that could be taken was dangerous!" What might be the outcome of such an opinion put in practice? The Russian surgeon's error of judgment, fatal to his patient and himself, was largely due to his reliance on the asserted use by other surgeons of large doses without ill-effect. Might not a like result follow an incautious dependence on DR. HAMMOND'S disbelief in the toxic power of cocaine? The Record well said of PROF. KOLOMNIN'S case: "The experience, though so sad, may not be without its lesson," and put a very pertinent query as to whether "there are not other surgeons who could report very serious, if not fatal, results from injudiciously or ignorantly using too large a dose of cocaine?

Fifty cases herewith noted, attest a power in this drug on some patients, that warrants caution with all.

"A young man, aged twenty-three, was sent to PROF. KOLOMNIN, and found to have a large ulcer of the rectum, which was diagnosticated to be of tuberculous nature. He decided to scrape and cauterize the lesion and to use cocaine anæsthesia during the operation.

"In order to produce anæsthesia, he had fifty grammes of a five-per-cent. solution of hydrochlorate of cocaine prepared: of this, thirty grammes were brought into use, containing exactly twenty-four Russian grains of the salt, or twenty-three English grains—the Russian grain is exactly one-sixteenth of a gramme—six grains being injected at a time into the rectum. After the third of these injections, it was found on examination that the part was still sensitive. A speculum was then introduced, the ulcer dabbed with a dry sponge, and then the fourth injection given, making twenty-four grains in all. After this the parts were tolerably anæsthetic. The ulcer was scraped, and a tampon saturated with oil inserted. The pulse was then accelerated. During the operation the patient groaned, so that even the twenty four grains had not produced complete anæsthesia.

"After the operation, KOLOMNIN went round his ward, and in three quarters of an hour a message was sent to him that the patient was very low. He found the pulse very weak, the face and hands cyanotic, and the respiration laborated. He considered that she was in a toxic state, and used every means to bring her round, PROF. SUSHCHINSKI being also invited to a consultation. Faradization, artifical respiration, hypodermatic injection of ether, administration of ammonia, tracheotomy for the inhalation of oxygen, stimulating and nutrient enemata—all were tried, but without success. KOLOMNIN had no doubt that death was due to cocaine."

DR. W. H. LONG, U. S. Marine Hospital Service, reports in the American Lancet the case of a man aged thirty-three, to whose larynx he applied, three times, a four-per-cent. solution of cocaine. Prompt relief was given, but three and one-half hours later the patient was found unconscious; breathing, labored; respirations, twenty; pulse, ninety; general condition, one of profound anæsthesia. Diagnosis, cocaine poisoning. Several doses of whiskey were given subcutaneously. In half an hour, consciousness partially restored, then gradual and full improvement save a feeling of great exhaustion.

Four days later cocaine was again used. Thinking the former toxic effect due to swallowing some of the solution, and probable absorption by larynx, extra precaution was taken to have it expelled and the pharnyx well rinsed. Two applications of a two-per-cent. solution were made. Relief was again complete, but three and one-half hours after, patient was in same condition as before, except the anæsthesia not so profound. Frequent injections of whiskey were again used with partial success—could swallow and answer questions—but, soon after, he suddenly ceased to breathe. The heart beat a short time longer. All efforts at resuscitation failed. The probable immediate cause of death was paralysis of the respiratory centre due to cocaine.

DR F. M. THOMAS, Leonardsville, Kansas, reported to PROF. R. OGDEN DOREMUS, as follows:

"Friday morning, October 23d, 1885, I was called to see Mrs—, aged thirty-nine, whom the messenger reported as dying. I found her unconscious; breathing heavily and irregularly, pulse thirty-five, intermittent; temperature normal; left pupil largely dilated, right natural; right arm and lower limbs motionless; face spasmodically drawn upwards toward the dilated eye.

"Spasmodic action of the left arm and upper part of the body came on regularly at intervals of a few minutes, during which she clutched the bed-clothing, and seemed to be trying to vomit. Twice during my attendance she ejected small portions of the previous evening's meal. Salivation was excessive; retained a dorsal decubitus; would not lie on either side. Heart seemed almost exhausted.

"I saw her at 5 A. M., and was with her nearly all the time till she expired apparently completely exhausted, about 3.30 A. M."

On inquiry, the doctor learned that Mrs. — had been freely using a four per cent. solution of cocaine, for toothache, due to several much decayed left upper molars. His diagnosis was cocaine poisoning.

DR. KNABE, of Berlin, records the case of a girl aged eleven, who was given four to twelve drops—the exact amount was not determined

—of a four-per-cent. solution of cocaine, by injection over the deltoid, to remedy frequent fainting fits—she having cardiac degeneration, sequeling scarlatina. In less than forty seconds the girl took a deep breath, became deadly pale and dropped unconscious. One minute later she was dead.

In the Australasian *Medical Gazette*, August, 1886, Dr. W. E. Ramsden Wood reports this case. "A. B. suffered from neuralgia, due to a defective tooth. Extraction being impracticable, cocaine—amount not stated—of a ten-per-cent. solution was injected, with prompt relief, lasting some hours. Next day, the pain, being very severe, patient sent to his chemist for a similar solution, and three minims were injected, but without the desired effect; he returned it to the chemist and asked him to make it stronger, which he did, making it twenty per cent. He brought this to me, but omitted to tell me that the solution was double the strength of that which I had used. He told me that three minims had not given him the relief that he had experienced from mine; I therefore gave him four minims of what I believed to be a ten-per-cent. solution, and within five minutes he became restless and inclined to vomit; he then began to feel a sensation of pins and needles in the left hand and arm, which rapidly extended to the right side. This was speedily followed by contraction and rigidity of the fingers, arms and legs; there was also a tendency to opisthotonos. His pulse became extremely rapid and feeble, his face livid, and the muscles of his mouth and cheeks strongly contracted. His respirations were short and convulsive, his feet and hands very shortly became cold, and a profuse perspiration broke out on his head and face.

I first gave him half a tumbler of brandy, followed at short intervals by drachm doses of spiritus ammon. aromatica, and applied strong mustard over cardiac region, and used friction to the upper and lower extremities; at the same time I let him inhale a few drops of chloroform to try and check the spasmodic contractions. After continuing these remedies for nearly an hour the pulse began to improve, the color to return to the face, and the rigidity of the muscles lessened, but returned immediately I stopped the friction. At the end of two hours he improved more rapidly, but felt somewhat drowsy, and it was not until about four or five hours that all the symptoms had subsided.

On questioning him afterward regarding his sensations, he told me that although he was unable to speak coherently, he knew all that was passing, and it was not until he felt the abdominal muscles becoming rigid that he felt anxious, for then he thought he was dying, and a sensation of suffocation came over him."

Dr. T. H. Burchard, in the Medical Record, December 5th, 1885, reports a case in which he injected ten drops of a four-per-cent. solution to induce local anæsthesia before removing a needle from the foot. "In about four minutes my patient suddenly clutched his throat, exclaiming 'I am dying!' and fell from his bed unconscious. Respiration ceased, his jaw dropped, his eyes rolled upward, and to all appearance he was dead. His heart was beating very faintly, although his radial pulse was imperceptible." Artificial respiration, hypodermics of ammonia and atropia, alcohol, sinapisim over heart and hot bottles were employed, and in "fifteen minutes after the catastrophe, his pulse was about forty-eight, very feeble, and respirations seven to eight. Unconsciousness continued twenty minutes." Patient recovered.

Dr. Spear, U. S. N., in the Medical Record, reports the case of a man aged twenty-nine, who took, subcutaneously, within seventeen hours, to remove the effect of a rum debauch, nearly ten grains of cocaine, Squibb's make. He was found in a toxic state; unconscious, face congested, and whitish grey; hands and lips blue; pulse feeble, fluttering and uncountable; respirations slow and almost imperceptible; face and neck streaming with sweat and body bathed in cold perspiration. Under treatment, in about 90 minutes he began to be conscious, and gradually recovered.

S. C. Kilhan, L.R.C.P., Sheffield, England, read before the Sheffield Medico-Chirurg. Society, November 25th, 1886, this case: On Nov. 9th, 1886, at 12 noon, John B. accidently took four and four fifth grains of cocaine hydrochlorate in the form of solution. At 12:30, he was seized with severe cramps in the stomach, nausea, throbbing and feeling of bursting in his head, failure of eyesight, loss of use of his legs, incoherence of speech and confusion of ideas, and drowsiness, but could always answer questions when aroused. No delirium; appeared as if drunk and got quite helpless. Brandy was given to him, and he vomited after it, but only the remains of food. About 12:50, he commenced sweating most profusely, shirt, etc., being soaked through, perspiration streaming down his face and body, and his head steaming. Pupils were normal and equal. No loss of taste. The sweating lasted some time, and was succeeded by very severe prostration, shivering, and feeling of impending death. At intervals, the patient had severe cramps in the stomach with retching and vomiting of a quantity of clear mucus, which relieved the pain. About 1:15 P.M., the pulse became intermittent—missing every fifth beat. This was accompanied by cyanosis of the face, and intense feeling of suffocation over the cardiac region. Relief was afforded by sinapisms. The pulse varied from 80 to 86, never more, and became gradually regular. About 1:45, P.M., he began

to have cramps in the legs and feet—especially on dorsal surface of right foot—and tingling and numbness in both hands. Later on the pupils became dilated. The vomiting and cramps ceased about 4 P.M.—unless food were taken—but the drowsiness, throbbing of head, and prostration continued up to 6 P.M., when the patient began to get warm and feel relieved. The improvement continued, and he could be moved at 8:30 P.M. There was great weakness, with swimming of head all night.

Next day there was still weakness, continual vomiting, a dry, leathery feeling in the mouth, with loss of taste, partial loss of power in the legs, and tingling and numbness of the fingers, especially of the right hand. These symptoms commenced nearly thirty-six hours after taking the cocaine, and most of them disappeared in twenty-four hours. The loss of power in the legs lasted three days, and the tingling and numbness of fingers longer. He was not able to write a letter until the sixth day, as he could not feel the pen between his fingers before.

An emetic was at first given, with sinapisms over the heart and stomach; afterwards, warmth and stimulants—principally compound spirit of ammonia.

The patient was in the habit of taking one-fourth grain of cocaine for neuralgia of the stomach. The most remarkable symptoms were the severe sweating, the intense prostration and the intermittent pulse.

DR. GEO. ELDER, Nottingham, Eng., in the Lancet, October 30, 1886, says: "Preliminary to opening a superficial abscess, twelve minims of a freshly-prepared ten-per-cent. solution were injected under the skin; three or four minutes after, syncope supervened, followed by twitchings of the face, falling of the jaw, coldness of the body, clammy perspiration, lividity of the face—in fact, all the appearances of imminent death. The patient was several minutes in recovering consciousness, and during the remainder of the day felt very prostrate." Dr. E. adds: "Several similar occurrences have been noted, showing that cocaine is not so innocuous as has been generally supposed."

JAMES LESLIE CALLAGHAN, in the London Lancet, June 12, 1886, reports as follows: "A patient of mine who was suffering from toothache, resulting from a hollow tooth, applied some of a four-per-cent. solution of hydrochlorate of cocaine to the tooth and gums. He did not spit it out, but, according to his story, swallowed from twenty to thirty drops. Within half an hour he was seized with a feeling of faintness and giddiness, then an attack of palpitation of the heart came on, and he complained of tingling and numbness, dryness of the throat, and a sensation of heat and flushings moving over the body, but especially on the spine. Suddenly a rash, like scarlatina, made its appearance over the body; vision was somewhat dimmed. I immediately gave him a strong dose of mustard and warm water, which did not cause emesis. I then administered twenty grains of sulphate of zinc, but without effect; it was only by repeating the dose that vomiting took place. The patient was relieved for a few minutes and seemed brighter, but the symptoms soon returned, and he felt so weak that he thought he was dying. I held some strong ammonia to his nostrils, but he said he could not smell it. I kept walking him about, but his legs tottered so much I had to support him. He constantly felt a desire to have the use of his bowels and bladder. The pulse became fast, weak and intermittent; the mind remained clear."

DR. FRED. S. WILLIAMS, of Puyallup, Washington Territory, reports to the Medical Record, September 25, 1886, this case: A lady on whom he wished to operate for a lacerated cervix, had a pledget of cotton saturated with a twenty-per-cent. solution of cocaine placed over the cervix, and four minims of the same solution injected on each side of the wound. "In about a minute and a half the patient began to speak as with an effort, saying 'I feel so faint,' and gasped as if struggling for breath. She was immediately placed on her back, with head lowered, and told to breathe deeply. She obeyed for a few times, then recommenced her gasping, which she continued for about a minute. Then followed shallow breathing for four or five minutes, when she began to rally a little, and the breathing became gradually stronger but irregular.

Her pulse at first was very rapid, irregular and weak, then became during most of the time of the shallow breathing almost imperceptible, gradually returning with the approaching normal respiration.

Consciousness at once was dulled, and during the period of the shallow respirations was completely lost.

At the end of about ten minutes she rallied, pulse, respiration and consciousness becoming normal."

MYERHAUSEN relates the case of "a girl, 12 years old, in whom two drops of a 2-per-cent. solution were instilled in the conjunctiva four times, at intervals of five to eight minutes. In all, only a little over one-tenth of a grain was administered, of which, certainly one-half must have been lost through the tears. Immediately after the operation, the child commenced to complain of headache, which became more and more severe until it was almost unbearable. Nausea and vomiting persisted through the entire day. The patient was greatly prostrated, stumbled in walking; speech was almost entirely destroyed, as though the tongue were paralyzed. These symptoms of poisoning lasted all through the night, in which

no rest was possible, and gradually disappeared towards the evening of the following day."

DR. ROBT. NEWMAN, New York City, kindly sent me this report: Patient, a female, aged thirty-seven, was treated for chronic cystitis by washing out and dilating the bladder daily. To allay the pain, fifteen minims of a four-per-cent. solution of cocaine were injected per urethra. This, increasing the drug a little each day, was used three times. After the third injection, while the cystic pain was allayed, a severe headache ensued which persisted for several hours. On the fourth day, having increased the cocaine to twenty-five minims, while still washing out the bladder with *hot* water, a piercing pain in left temple occurred, running round the back of the head in a circle, and feeling as if the top of the head would split open. Pupils dilated; expression anxious; restlessness marked. More than a week passed before all toxic traces ended. There can be no doubt cocaine caused the trouble, and the symptoms were alarming."

In the London Lancet, 1886, is recorded the case of a female, aged twenty-five, who had a watery solution containing fifteen centigrammes of hydrochlorate of cocaine injected into the nose. In twenty minutes, giddiness, weakness and impaired vision ensued. A little later she was semi-comatose, with slight dyspnœa and pulse uncountable. These symptoms disappeared in three hours under friction and internal stimulation.

(*To be continued in our next.*)

The above article by DR. MATTISON on the dangers which are liable to attend the exhibition of cocaine, is very timely. The freedom from untoward results which has attended the use of the drug in the hands of many who have written of it in rose-colored terms, is calculated to stimulate, and has indeed stimulated, its lavish exhibition and without fear of accident. The fact, so clearly set forth in DR. MATTISON'S paper, that it is not by any means a harmless drug, should certainly be noted by the practitioner. One point in the treatment of a number of accidents mentioned in the paper provokes comment. We refer to the free use of alcoholic stimulants to the victims. This, from what we infer to be the toxic action of cocaine on the respiratory centre, is very irrational treatment—as much so as the exhibition of alcohol in a case of opium-poisoning. We would discountenance the use of this stimulant in these cases, and give atropine instead. The aphorism of ERLENMEYER, that cocaine is the third scourge of humanity, alcohol and morphine being the other two, may in time be more generally accepted than when first enunciated.

Correspondence.

PHYSICIANS' FEES.

I was very much pleased and interested at the sound sense and valuable suggestions contained in the communications of DRS GRONER and REESE, in a recent issue of the AGE. It is too true that while every other calling in life demands and obtains the money, the physician, for no sensible or just reason, waits indefinitely or eternally for his pay. It is high time to call a halt in this indiscriminate credit business, and this can best be done by every physician in a neighborhood or field of practice signing an agreement to send out his bills, say, monthly or quarterly, have a general blacklist and refuse credit when a bill is owing to any brother, until it is settled by cash or judgment note. The busy man will say he cannot spare the time to make out several hundred bills monthly or quarterly. I would say to him to take the time heretofore devoted to some dead beat at a distance, or when he gets in the habit of send his duns monthly, he will find it just as easy as to do so yearly, and his patrons will find the bills much easier to pay. We, as physicians, are more to blame than the public, for our bills being the last paid and the least thought of. We must give them to undestand that our avocation is a profession only as applied to professional men, but is a business as far as gaining a livelihood is concerned, and that the days of medical saintism have vanished into thin air (upon which we have been trying to live). It remains with us, then, to educate the people to paying our justly earned bills as they do the grocers, and I opine they will be more ready for the change than we anticipate.

A. M. REED, M. D.,

CLARION, PA.

Luther was troubled with whizzing, buzzing, thundering noises in his head. After trying medicine in vain for their relief, he attributed them to visits from the devil. On one occasion they awoke him at night, and he arose saying "Is it thou devil? Well be it so, I commend myself to God". At another time he said "it is the devil that does this. Hark! how the devil is puffing and blowing." His opinion of physicians who tried to heal his infirmity as though it proceeded from natural causes, was that they were ignorant blockheads, knowing nothing about the devil or his works. This rebuke we should regard as complimentary rather than otherwise. Doubtless, the devil is a mischievous and malignant old imp, but science has relieved him of much opprobrium, and had Luther lived and been similarly afflicted in these later days, the doctors would have classified his case as one of Menière's disease.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., MAR. 25, 1887.

Notes.

The Detroit College of Medicine turned out its annual contribution to the medical ranks, on the 21st inst. The contribution in the present instance numbered thirty-three graduates. It was a fine-looking class and very intelligent —the handsomest and most intelligent, indeed, which had ever been graduated from the same institution. It is asseverated of every graduating class that it excels in point of all those qualities which are factors of success, all preceding classes. The fact but goes to prove that medical colleges are keeping up with the procession which is headed for the goal labeled perfection. The class in which we graduated was, *par excellence*, the best to which the alma mater had up to that time given birth. With the lapse of years the old dame grows both more prolific and more vigorous, and the class of this year excelling those of all previous years (each one of which excelled its predecessors, immediate and remote,) we feel that we are, as compared with the latest brood, hardly fit to assume the solemn duties of the M. D. It must be only the assurance of those whose hairs are beginning to show the silver, which keeps them from feeling uncomfortable in the presence of the recent graduate. But this is merely by the way. The late class graduated by the Detroit College of Medicine was a really fine class, and it was launched in really excellent style. Henry M. Cheever delivered the lay address and Dr. J. Henry Carstens the professional. Both were listened to with delight, both by graduates and an audience which filled the Detroit Opera House to its fullest. The sheep-skins were distributed by the President of the College, Hon. Sidney D. Miller, whom long experience in this line of work has made very graceful and very proficient. The graduating class entertained the friends at a banquet at Harmonie Hall at the close of the commencement exercises proper. The *menu* was *recherche*, and the responses to the neatly constructed toasts were in keeping.

The St. Paul Pioneer Press gives a verbatim report of the examination of a candidate for license to practise in Dakota. Among the questions and answers the following are a few: Q. What books have you in your library? A. Gunn's Family Physician and Common Sense Home Doctor. Q. What is an atom? A. Anything about as large as my fist. Q. What is a molecule? A. Anything about half as large as an atom. Q. What are the three great cavities of the body? A. The head, the belly and the diaphragm. Q. What are the contents of the head? A. The brain and three skins. Q. What are the names of the tissues you call skins? A. I have forgotten them. Q. Is there such a cavity as the thorax? A. Yes. Q What are its contents? A. Heart, lights and liver. Q. Are you sure the liver is in the thorax? A. I made a mistake, it is in the diaphragm. Q. What are the contents of the abdomen? A. Kidneys and prostrate gland. Q. Have you ever treated a case of enlarged prostate? A. Yes, lots of them and never lost a case. Q. Did you ever find an enlargement of this gland in the female? A. Yes, numbers of them. Q. Where is the prostate situated in the female? A. About an inch further back than in the male. Q. Do you not think it assurance on your part to ask us to certify to a lie, in order that you may go out to kill legally? A. I have a large family to support and am just as good a doctor as any of you. I think a d——d good licking would do you good.

A. R. Mitchell, M. D., Dean of the University of Nebraska, writes us regarding hypodermic tablets as follows, viz.:

Convenient and reliable preparations of the more important drugs being a necessity of the profession, I deem it but justice to record my experience in the use of hypodermic tablets, which have served me well in many cases.

Nearly all the solutions for hypodermic use have, in my hands at least, proved very unstable, but with solutions prepared from hypodermic tablets, I have never been disappointed.

Age, I think, affects somewhat their solubility, but it has never in any case taken more than a minute or a minute and a half to effect complete solution.

No abscesses, or even severe irritation, have ever followed the use of hypodermic tablets in my hands, and they now occupy a prominent place in my armamentarium. It is but just to mention that the tablets used by me, and on which my experience is based, are those manufactured by Parke, Davis & Co.

The embers which have for nearly a decade been smouldering in the University of Michigan seem to be on the eve of being again fanned into a flame, and anon the old, familiar cry

"Homœopathy at Ann Arbor" may cause factions to array themselves as of yore. The trouble threatens from the complex or duplex system of teaching homœopathic and "regular" students. Homœopathic and "regular" anatomy, physiology, etc., being supposed to be identical, the homœopathic department at the University is not furnished with chairs on these subjects, and its students are sent across the campus to take them in the regular way at "regular" hands. This they do not seriously object to, but they do desire, very much, when they are *au fait* in these particular branches, to have the "regular" professors give them certificates to the fact. The "regular" professors, however, find that to certify that a homœopath is proficient in these branches would be a violation of the Code of Ethics; it is enough for them to teach homœopaths, but for them to say that such teaching has been effective would be very "irregular." The common herd cannot, of course, comphrehend the niceties of the distinctions, but that makes little difference—they can look on and enjoy the fight all the same.

Dr. H. W. Ridenour, of Massilon, O., in a paper read before the Stark County Medical Society, thinks it passing strange that practitioners should be ambitious to shine as surgeons. "Doctors," he says, "will almost tear each other's clothes off, so great is their rivalry, to aspire to be descendants of the tonsorial homo. How much better it is to dandle the babies, talk about the weather, gossip, be a children's and a ladies' man, with a good fat family practice, have plenty of money, and no enemies, no suits for malpractice staring you in the face, and not be liable to the appellation of murderer. The grave will kindly cover the mistakes of the physician, while a crooked limb meets the aspirant to surgical dishonors at every corner."

From H. M. Cheever's address to the graduating class of the Detroit College of Medicine: "You have entered a noble profession that traces its patent of nobility back through the centuries to the inn at Bethlehem. You need no greater ancestry of your art than that. Believe in it as you believe in your existence. Cherish it as the apple of your eye. Revere it as a creed, and as the Mohammedan never holds his koran below the girdle, nor touches it with impure hands, because of his belief in its divine origin, so do I admonish you to hold your profession above the baser things of life, minister in it from pure motives, and never practice it with but clean hands."

Dr. Ostrom reports the case of a fasting girl, Lizzie Murphy, fourteen years of age, near Saginaw City, Mich. She showed hysterical symptoms at the outset, and for two weeks could be prevailed on to take only an occasional teaspoonful of wine, jelly or water. For five weeks after this, however, her fast was absolute, neither solid nor liquid being taken. She was then induced to take a little beef tea, and hopes are entertained of a return of her appetite. We believe this to be the longest abstinence from liquids on record.

Mr. Huxley repudiates, as a philosophical error, the doctrine of materialism as he understands it, just as he repudiates spiritualism as represented by Mr. Lally, a noted English spiritualist. His reason for doing this in both instances is the same; namely, that, whatever their differences, materialists and spiritualists agree in making very positive assertions about matters of which he is certain he knows nothing, and about which he believes they are, in truth, just as ignorant. Huxley is an agnostic.

Book Notices.

The Principles and Practice of Operative Surgery. By Stephen Smith, A. M., M. D., Professor of Clinical Surgery in the University of the City of New York; Surgeon to the Bellevue and St. Vincent Hospitals, New York; Consulting Surgeon to St. Elizabeth's Hospital, etc., etc. New and thoroughly revised edition. Illustrated with one thousand and five wood cuts.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

The first edition of this work appeared in 1879, and its merit won for it such an established place in the esteem of the profession that since then eight large editions have been exhausted, all of which have, however, been duplicates of the original. The author has in the edition now issued, thoroughly revised the work, and we have before us practically a new book, bringing its subject abreast of the advances which have characterized the intervening period of great activity in surgery. It opens with the consideration of a question of paramount importance to the surgeon, viz.: his civil obligations, for while it is his duty to do the best he may for his patient, he owes it to himself to take all possible precautions against suits for malpractice in the event of untoward results. While surgeons have been mulcted in spite of their best efforts on behalf of their patients, the fact remains that the law cannot be said to be unjust to them, and that a strict compliance with its requirements is an almost invariable safeguard against pecuniary loss in the shape of damages. Dr. Smith gives the legal construction of a surgeon's obligation as follows: 1. He shall possess that degree of knowledge, skill and experience which is ordinarily possessed by the professors of the same art or science, and which is regarded by those conversant with that employment as necessary

and sufficient to qualify him to engage in practice; 2, that he use reasonable and ordinary care in the exercise of his skill and the application of his knowledge to accomplish the purpose for which he was employed; and, 3, that he use his best judgment. The book is as valuable an aid to the possession of the first requirement as there is, in the shape of a book, before the profession. The two other requirements can come only of the exercise of innate qualities.

The book, as a whole, is already too familiar to the profession to require any words of commendation by way of introducing the present edition, which is given forth in the publisher's best style.

Clinical Manual for the Study of Medical Cases. Edited by James Finlayson, M. D., Physician and Lecturer on Clinical Medicine in the Glasgow Western Infirmary; Physician to the Glasgow Hospital for Sick Children, etc. Second edition, revised and enlarged, with one hundred and fifty-eight illustrations.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

This is an exceedingly valuable book as an aid to correct diagnosis, without which medicine, as an art, is valueless. The innate power of nature to right herself when disturbed, too often makes the practitioner careless in regard to the discovery of the exact nature of the disturbance. It is to be feared that diagnosis is the most superficially performed part of the treatment of a case, in the majority of instances, and scientific medicine is correspondingly brought into disrepute. There is no division of the practice on which the practitioner needs to be more careful in preventing the accumulation of rust, for the intuition which comes of experience is very prone to foster carelessness in this direction. To guard against this tendency, such a book as the one before us, in which the mind is not diverted from the points of diagnosis by references to other matters, will be found most valuable. We should advise every practitioner, and the older he is the more we should advise him, to possess himself of such a book. Its perusal would elevate his conception of medicine, both as a science and as an art, and the benefit would accrue to both his patients and himself. Dr. Finlayson has given us a most excellent treatise—a comprehensive without being too voluminous. It covers the whole range of diseases, and the most cursory examination of it will convince any physician that his library is not complete without a copy of it.

A Reference Hand-book of the Medical Sciences, Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By Various Writers, Illustrated by Chromo-lithographs and fine Wood Engravings. Edited by Albert H. Buck, M. D., New York City. Volume IV.
New York: Wm. Wood & Co.

The previous volumes of this great work have received notices in this journal as they have been given from the press, and our readers are already familiar with the scope. The volume before us comprises 815 royal-octavo pages and gives a well-nigh encyclopœdic consideration to all subjects whose titles range from "ichthyol" to "Milford Springs." If it be the duty of the physician to know something of the cognate sciences, there is no work which will assist him to such knowledge with so little expenditure of his time or energy. The completed work will constitute a very comphrehensive library in itself and the thoughtful, studious physician who can afford to possess himself of it, will agree with us that he could have invested his money in no more profitable a direction.

A Text-Book on Surgery, General, Operative and Mechanical. By John A. Wyeth, M. D., Professor of Surgery in the New York Polyclinic; Surgeon to Mt. Sinai Hospital; Consulting Surgeon to the Yorkville Dispensary for Women and Children; to the Woman's Hospital of Brooklyn; etc., etc.
New York: D. Appleton & Co.
Detroit: John Macfarlane.

A new text-book on surgery! It comes to us, too, without a preface, and its *raison d'être* must, therefore, be searched for in its 777 octavo pages. The book is divided into twenty-one chapters, starting with those devoted to the more elementary but not less important divisions of the subject, and by natural progression taking up the more complex. A system better devised for the needs of the student could scarcely be conceived. The style of the author is, moreover, very pleasing. The illustrations are of a superior order of merit, the cuts of the more important operations being colored to represent the blood-vessels and nerves involved. It is not too much to say of the book that there is none now before the profession which is better adapted to the needs of either the student or the practicing surgeon.

Medical Progress.

Experiences with Drumine as a Local Anæsthetic.—On January 6th, 1887 I received from John Reid, M. A., M. D., of Port Germein, South Australia, a copy of the Australian Medical Gazette, of October 15th, 1886, containing a paper by him on "Drumine: a new Australian Local Anæsthetic," and a box containing 40 grains of drumine. The drug was in the form of a semi-crystalline, waxy mass, of a greyish-white color. Dr. Reid requested that the drug should be submitted to trial as to its anæsthetic properties.

Twenty grains of it were, on January 7th, dissolved, by boiling in equal parts of absolute alcohol and water, and filtered, the strength of the solution being 4 per cent. of drumine. It tasted faintly of apples on the tongue, and caused a slight feeling of tingling and harshness where it had been applied to that organ. Next day, January 8th, 4 minims of the solution were

injected hypodermically into two patients who were about to be subjected to operation, one for gouging out of tubercular cervical glands, and the other for the opening and scraping out of a chronic cervical abscess. The injection was made at 10.45 A.M., in the immediate neighborhood of the diseased parts At 11.45 A. M, when the operations were performed, no anæsthesia was observable, and the patients were therefore rendered insensible by chloroform until the operations were completed. At this time (11.45 A M.) 4 minims were injected hypodermically into the backs of the forearms of Mr. MIDDLETON, student of medicine, and myself. A quarter of an hour, half an hour, and an hour later, neither of us was aware of any diminution of sensation on or near the injection site, but pretty smart pain was felt, which lasted for several days, and then disappeared. During the afternoon of the day of injection, Mr. MIDDLETON felt as if under the influence of a small dose of morphine. I was unconscious of any unusual feeling, save the pain and tenderness at the injection site.

Next day, January 9th, the remaining 20 grains of the drumine were dissolved in pure water by boiling, and the solution filtered, the strength being, as before, 4 per cent. of drumine. On January 12th, 6 minims of this solution were injected hypodermically into the back of each of our other forearms; no anæsthesia resulted, but a sharp aching pain was felt in the arms, lasting a day. The pain diminished sensibly on the following day; but the site of the injection showed an area of firm swelling and tenderness over a spot the size a crown-piece (a phenomenon not observed in the alcoholic solution), remained tender and swollen for weeks, but gradually became less so; yet even so late as February 8th, a flat area of induration, with slight tenderness, was very evident at the injection site in both of us. At the same time as the injection a drop of the solution was instilled into my own conjunctival sac, and into that of Mr. RIDDELL and Mr. WILLIAMSON, students of medicine. No anæsthesia of the cornea or conjunctiva was observable in any of us. It had no perceptible action on the pupil or accommodation.

On purpose to institute a comparison between the effects of this drug and of cocaine, Mr. MIDDLETON and I subjected our forearms to the action of cocaine On January 29th, at 12.25 P.M., 5 minims of a 10 per cent. solution of cocaine were hypodermically injected into the back of each of our left forearms The act of injection was much less painful at the moment than that of either of the solutions of drumine. After five minutes (at 12.30), a patch of skin over the spot elevated by the injection, the patch being ¾ of an inch in greatest diameter, oval in shape, with its long axis corresponding to that of the forearm, was anæsthetic to the point of the needle, while the sensibility around was perfect At 12.43 the anæsthesia was so complete on the patch that incisions, made slowly and deliberately down to the aponeurosis of the forearm, caused no pain in my case, and only slight discomfort in that of Mr MIDDLETON. At 12.45 the wounds were sutured, painlessly to me, and nearly so to Mr. MIDDLETON in whom the anæsthesia was throughout less perfect than in myself. At 12.50 the above patches became surrounded by an area of rosy redness, over which sensation was decidedly diminished. These areas increased in size, were oval in shape, and extended down the forearm from the point of injection, but scarcely ascended above it at all, and were on Mr. MIDDLETON'S arm of a rounded oval shape, on mine more of a ribbon form. At 12.50 their measurements were 2 by 3½ inches in Mr. MIDDLETON, and 4 by 1½ inches in me. Surgical needles could be passed through the skin with little pain, and an incision was made in my forearm down to aponeurosis, without intolerable discomfort. The suturing of this incision was disagreeable, but not actually painful. At 1 P.M. (25 minutes after the injection), these areas of deadened sensation occupied one-half the circumference of the forearm, and everywhere within them the sharp points of a pair of dressing scissors could be scored over the skin, so as to scarify it, without causing actual pain. Sensation of contact however remained, and never entirely abolished. This was possibly due to the movements communicated to the deeper parts. The anæsthesia corresponded pretty closely to the area of redness of the skin. In Mr. MIDDLETON a secondary patch of complete anæsthesia appeared for a short time, 2 inches below the injection site, and was, like the patch there, of oval shape, and about ¾ of an inch in greatest diameter. The anæsthesia faded more rapidly on my arm than on Mr. MIDDLETON'S. The wounds made began to smart badly at 2 P. M. with me, in Mr. MIDDLETON'S arm not until 3.30 P.M., or three hours after the injection.

It seemed as if the insensibility were due to a gradual diffusion of the cucaine through the subcutaneous tissues from the point where it was introduced. The wounds made under cocaine healed badly in both our arms, showing more inflammation, induration and pain than should have been expected on my arm, while, on Mr. MIDDLETON'S, the wounds suppurated superficially. In neither of us was the induration gone on February 8th, that is, ten days later.

These experiences indicate pretty clearly that, as a local anæsthetic, drumine has little, if any, effect, and certainly cannot be compared with cocaine. It is possible that the drumine supplied to me may have been altered in composition or have otherwise lost its effect during its prolonged transit from the Antipodes. This suspicion is, I think, strengthened by a letter I received (after the above notes were written) by DR. REID'S brother, who writes: "The sample sent was stale through exposure: another sent at the same time was quite decomposed." Fresh supplies are, however, expected, and, if they reach my hands, shall be duly submitted to trial, and the results made public.—ALEXANDER OGSTON, C. M., in *British Medical Journal*, Feb. 26.

THE TREATMENT OF COLDS.—Of all disagreeable constitutional tendencies, the tendency to "catch colds" is one of the most disagreeable to the individual, and besides the unpleasantness there is always the danger that a catarrh may outstep its usual limits and develop into some grave inflammation.

Is the nature of common catarrhs generally understood? To a certain extent I think it is, but not fully. Let me enunciate the broad characteristics of colds. Catarrhs are excited *de novo* by exposure to wet, cold, and draughts.

This is a truism. Most frequently they develop in delicate and in highly neurotic individuals, in fact in the classes which furnish martyrs to common neuralgia. I believe moreover that when once a catarrh is properly established the affected person's breath is infectious, in the acute stage of the disease at least. What then is the nature of the affection? (1) Is it a specific poison comparable to that of the infectious fevers? (2) Does the affection start as an idiopathic inflammation and develop a specific person which is given off by the breath? (3) Is it of nervous reflex origin purely?

Bürger has discovered micrococci in catarrhal secretions, and they are possibly factors in the affection. Let us suppose that these micrococci or their spores are distributed nearly universally in the atmosphere, and are carried in fomites. Let us suppose them in their usual state to be unable to attack the healthy buccal, nasal or other mucous membranes. Let us presume that there is a condition in which the trophic nerves of those membranes become depressed and lose their tonic action by the action of poor blood, or from the periodical neurasthenia of hereditary neurotics. Here the result of section of the trigeminus on the eye is recalled to one's mind, and the fact pointed out by SNELLEN that ophthalmia did not ensue if the eye was carefully covered with cotton-wool, thereby to a great extent excluding micro-organisms, before the nerve section was made. Let us suppose that by feeding in such pastures the progeny of the attacking catarrhal micrococci become so virulent as to be able to attack successfully the healthy membranes. We know by PASTEUR'S experiments the extensive effects of culture on some micro organisms. On these not unreasonable suppositions then all the peculiarities of catarrhs are explainable.

Influenza epidemics may be explained by supposing that within large tracts of country all catarrhal micrococci became suddenly virulent owing to some climatic or telluric fostering cause, or to some law of heredity or evolution of the organisms themselves. This would account for the extensive and sudden outbreaks which, on first view, seem so surprising.

The usual "coddling" treatment of colds, except the very old, very young, or very delicate, is a mistake. A person suffering from a catarrh should certainly be warmly clothed and avoid draughts: but by shutting himself up in a warm room, by taking warm air baths and lowering medicines, he only promotes the development of the exciting cause of the affection.

"Feed a cold, starve a fever." There is a deal of wisdom in the first part of this advice. A person with a catarrh should take an abundance of light nutritions food, and some light wine, but avoid spirits, and above all tobacco.

Now as to medicines. All depressants should be avoided. For some time I was in the habit of taking mixture recommended by DR. JUKES STYRAP, composed of minute doses of morphine, antimonial wine, and potassium citrate. This beyond doubt always subdued the acute inflammatory stage, but I have no hesitation in saying I was depressed by its action, and rendered liable to relapses and renewals. Personally I have found the large dose of an opiate in the early stages, as extolled by SIR THOMAS WATSON and DR. GEORGE JOHNSON, very unpleasant and of but little use.

Trying to avert an attack by a large dose of potassium iodide failed in my hands. The bromides were useless through all stages. Antiseptic inhalations and spraying afforded temporary relief from the distressing symptoms, but failed to cure.

Belladonna, quinine, and arsenic I have found useful when given separately—not so much in large as in small doses. When combined I believe them to be nearly specific—prophylactically and therapeutically, if I may so speak.

The formula I invariably use is as follows:—

℞ Quininæ sulphatis gr. xviij.
Liquoris arsenicalis ♏xij.
Liquoris atropinæ ♏j,
Extracti gentianæ gr. xx,
Pulveris gummi acaciæ q. s. ut fiant pilulæ xii.

Sig. One every three, four, or six hours according to circumstances.

If these pills be commenced in the early stage of a common cold, *i. e.* when the affection is as yet confined to the nose and pharynx, the affection will be nipped in the bud. At starting one pill should be taken every three or four hours, and later on every six. If a catarrhal subject has a box of these pills always at hand, he has, I believe, a weapon wherewith to meet and defeat his enemy. The longest time I have seen a cold last whilst the patient was fairly taking these pills was three days. How the remedy acts I do not know, except it be as a powerful nervine and general tonic, bracing the patient's tissues up to resist the attacks of the exciting cause of the affection.—J. H. WHALEN, M. D., in *The Practitioner*, March, 1887.

TREATMENT OF PHTHISIS BY GASEOUS ENEMATA.—Much interest has been displayed by Riviera physicians in a new method of treating phthisical, bronchial, and asthmatic sufferers, introduced by DR. BERGEON, of Lyons. DR. BERGEON'S mode of procedure is simple, though from considerations of delicacy (perhaps false) somewhat difficult of application in the case of English patients at all events. As much as one litre at a sitting of pure carbonic acid gas, which has previously been passed through half a litre of a mineral water known as *Eaux Bonnes*, which is impregnated with sulphuretted hydrogen, and resembles somewhat our Harrogate water, is slowly injected into the rectum, the process occupying at least twenty minutes. The gas is absorbed by the veins and lacteals, and so thoroughly permeates the system that after a few minutes a pronounced odor of sulphuretted hydrogen is detected in the breath. The time chosen for giving the enema is an hour before or three hours after a meal, and after toleration has been established two or three injections may be administered daily.

Great results are claimed by DR. BERGEON for his mode of treatment, which he has pursued during the past two years. In early phthisis two or three weeks of this treatment procured arrest of the morbid process, and a few months, a cure. The pulse is lowered, temperature falls, night sweats cease, appetite returns, expectoration daily diminishes, loses its purulent character, and the cough becomes less frequent. Even in laryngeal phthisis,

when all local or constitutional treatment has failed, rapid amelioration has been obtained.

In reading the above statements—DR. BERGEON'S own—we are involuntarily reminded of the glowing pamphlets of charlatans—the results seem to us to point either to excessive credulity or hopefulness, or to dishonesty on the part of the person narrating them. But in this case, where the treatment is advocated by a professor of the School of Medicine of Lyons, and where the matter has been brought before the profession in the most orthodox manner by communications to the Paris Academy of Sciences and Medicine, no suspicion of the kind need be entertained. There is no doubt whatever that the sulphuretted hydrogen thoroughly permeates the lungs, but whether by doing so it produces all the favorable effects claimed for it, can only be decided by trial. At the first sight it does not appear on the face of it why the gas introduced by the bowel should act differently from the gas introduced by the stomach, as it is when the waters of Harrogate, etc., are taken, or when inhaled, though DR. BROWN-SEQUARD has long ago demonstrated the fact that the gas is poisonous only when inhaled. Again, it is well known that bilious persons often secrete large quantities of sulphuretted hydrogen gas, which is voided by the bowel, and yet no relation between this and immunity from lung disease has been observed. Of course the theory which first directed the researches of DR. BERGEON was that phthisis was directly caused by the presence of bacilli in the lungs; the carbonic acid gas was meant to act as a carrying medium by which sulphuretted hydrogen might be introduced into the lungs with the purpose of poisoning and destroying bacillar germs. The reason why this object could not be gained by the simpler method of inhalation is that sulphuretted hydrogen is one of the gases which destroy life by causing spasm of the glottis. There can be no doubt that the object of DR. BERGEON, *i. e.*, the permeation of the lung tissues by sulphuretted hydrogen gas is completely achieved by the method employed, but whether the further and ultimate object of curing phthisical patients will be attained can only be proved by experiment and the lapse of time. Many of us bearing in mind the undoubted heredity of consumption, the fact that whole families, the members of which perhaps are scattered over the face of the earth and placed under totally different conditions of occupation and climate, have been known to succumb to this disease, cannot accept the presence of bacilli or their germs as its cause, and only undisputed results will be able to convince us of the efficacy of this treatment.

DR. BERGEON, however, has no doubt of his power of producing the most brilliant effects, and has certainly shown us that his confidence is unbounded in his own success. DR. CAZIN, well known throughout France for the able manner in which he conducts a large hospital near Boulogne containing 500 scrofulous and tubercular children, has recently paid a visit to Mentone, where his wife is under treatment for bronchitis. DR. BERGEON delivered a lecture there to twenty-two doctors, and explained and illustrated his method. Since then many of his hearers, among them M. CAZIN himself, have administered the injections to their patients, and though sufficient time has not yet elapsed to enable a final judgment to be pronounced, the results are said to be satisfactory.

Those of my readers who desire more detailed information will find it in DR. MOREL'S pamphlet entitled "Nouveau Traitemente des affections des voies respiratoires d'apres la Méthode, du DR. BERGEON," (published by G. MASSON, Paris, Boulevard Saint Germain).—ALFRED DRYSDALE, M. D., in the *Med. Press and Circular*, Feb. 16, 1887.

HYOSCINE IN KIDNEY DISEASE.—Having lately experienced considerable difficulty in treating a case in which sleeplessness formed a prominent and distressing symptom, and having found great advantage from the use of hydriodate of hyoscine, to which my attention was opportunely directed by a paper by DR. MITCHELL BRUCE in the November number of the Practitioner, I propose giving a short account of the case, showing the results I obtained with varying doses of this drug.

In the spring of 1884, the patient, a man aged fifty-eight, sent me a sample of his water to examine; I found it contained a considerable amount of albumen, and casts indicative of chronic kidney mischief. He consulted me again in the autumn of 1886, when he had slight œdema of the lower extremities, shortness of breath on exertion, cough with slight mucous expectoration, and occasional asthmatic attacks at night. The urine was now found to be nearly solid with albumen, and hyaline, granular, and oily casts were present. The patient was much emaciated, his digestive power was impaired, and the heart's action was rapid and feeble. From this time in spite of treatment the symptoms gradually became more serious until November 23d, when he first complained of sleeplessness. This condition was for a time relieved by moderate doses of chloral hydrate and bromide of potassium (gr. xx of each); about a week later it was deemed advisable to increase the dose of chloral, the amount of sleep produced not being sufficient. Early in December the bromide was discontinued because the patient had a firm conviction that a skin irritation, from which he suffered, was made worse by it. Thirty grains of chloral were now given alone in a single dose, and, for a few nights, quite refreshing sleep was obtained. From the 11th to the 16th, however, constant changes had to be made; the chloral was given in divided doses at short intervals, but even when fifty grains were taken in the course of the night the patient still complained of constant wakefulness. A complete change of treatment was made on the 17th, when half a drachm of tincture of cannabis indica was prescribed, but the result was disappointing. On that night the patient slept in all seven and a half hours, but with frequent short periods of wakefulness, and it was characteristic of the peculiar action of this drug that in the patient's idea these intervals were magnified into periods of indefinite length, so that he flatly contradicted the accuracy of the nurse's report the following morning. Similar treatment the next night produced the same results, the patient and the nurse once more disagreeing as to the amount of sleep. For three nights more chloral and bromide were employed, and then, when the patient was haggard and exhausted, it was finally decided

to employ hyoscine. The solution was prepared for me by MR. MARTINDALE, according to the formula of DR. MITCHELL BRUCE.

℞ Hyoscinæ hydriodatis, gr. j.
Aquæ destillatæ, ℥cc.

Of this solution two minims were injected subcutaneously on the night of December 23d at 11 P.M., and the following morning I learned that the patient had been "drowsy and half asleep, wandering and talking constantly, up to 6:45 A.M., then he really had some good sound sleep until 8 A.M.," when he awoke "quite good-tempered and read the paper for an hour, and said he had had a delightful night." On the 24th two minims were again employed, notwithstanding the delirium of the previous night. The result was much the same; he wandered very much during the early part of the night; at 5:45 A.M. he awoke and read the paper until 6:30 A.M., when he again fell asleep and did not awake until 9 A.M., when he was "as bright and pleased with his night's rest as possible." The third night, with the same dose, the delirium was more marked and more violent, although in the morning the patient appeared perfectly satisfied with his night's rest; as before, the period of delirium lasted about six hours and was followed by a time of "good refreshing sleep." The nurse, from whose written reports I have quoted above, now said, "This injection is really a great deal more trouble to me than the other draughts; he requires constant watching until after six or seven."

Considering the character of the delirium, the constant chattering, occasional laughter, and on the last night the amount of excitement, and thinking these symptoms resembled those of a case of belladonna poisoning, I decided to diminish the dose, and on the 26th employed only one minim. The change was now very striking, he "was quiet though chattering until 4:30 A.M.," asleep again from 5:30 to 6:45, then came a short time of wakefulness, and once more sleep until 8:30. From this date the dose was kept the same (viz. one minim) until Jan. 7th, and the results, so far as the nights were concerned, did not vary much; the patient was nearly always asleep, or chattering in a purposeless fashion, in from ten to twenty minutes after the hypodermic injection, and the quite delirious condition passed on gradually into sound sleep. Some nights are described as having been "perfect," and the days also were improved, a more even temper taking the place of the previous irritable condition.

With regard to other results of the use of hyoscine—during the night there was frequently a complaint of dryness of the throat, and on two or three occasions the patient awoke with a feeling of nausea which soon passed off. The pulse did not materially vary in volume, although it almost always fell five beats or more after the injection. Then as to accommodation—there was absolutely no interference with this even when the dose had been relatively large; on no occasion during the fortnight of the employment of hyoscine was I able to detect any change in the size of the pupil or any impaired reaction to light. With the progress of the disease the patient read less, but, on being asked the reason, he said at once that it tired him to hold a book or newspaper for more than a few minutes at a time, and he did not refer to any difficulty of vision, nor to headache likely to arise from defective accommodation.

The conclusions I drew from my observations on this case are the following:

Hydriodate of hyoscine is a drug which can be used with perfect safety in cases of kidney disease where morphine is inadmissible. It is a drug which may give rest when other sedatives fail.

If used in two-minim doses subcutaneously it may give more satisfaction to the patient than to the attendants, since the unconsciousness may be accompanied by angry and combative delirium; should this occur it will probably be sufficient to diminish the amount employed.

It is very rapid in its action, unconsciousness following in from ten to twenty minutes, and the after effects are of a soothing character.

Even when delirium is present in a violent form, it is followed by quiet sleep, and the patient, being unconscious, is much more refreshed than by a night of short snatches of sleep produced by chloral or bromide, and the result is a marked improvement in both aspect and temper. And lastly, no irritation is produced around the site of injection.

I believe that hydriodate of hyoscine will probably take a firmly established position as a sedative in cases where morphine cannot be employed.—NESTOR TIRARD, M. D., in the *Practitioner*, Feb., 1887.

THE BENEFTS OF MOUNTAIN-CLIMBING.—As more and more attention seems to be paid each year to the climatic treatment of disease, it seems well to mention the increased benefit which the patient may receive by climbing gradual and steep ascents while seeking a renewal of health in suitable climates. JACCOUD has called attention to this in his admirable work on the "Curability and Treatment of Pulmonary Phthisis:" "Walking is not the only form of exercise which should be taken; if the character of the country is suitable, constant ascents, proportionate to the age and strength of the patient, should be prescribed. These ascents should be made with slow and measured steps, so as to occasion no fatigue to the respiratory organs, and there should be occasional rests on the way. If it is wished to expand the lungs as far as can be done, the person should be advised while climbing to place a stick between the arms, which are thrown back, and the dorsal region of the back. In this position the transverse diameter of the lower part of the chest is completely expanded, the fixed position of the upper limbs causes the whole action of the auxiliary inspiratory muscles to be combined in raising the chest, and the upper part of the lungs, whose expansion is always measured by that of the chest, dilates as far as possible at each inspiration, which is necessarily exaggerated by the effect of the ascent. When carried on in this way, such a plan constitutes a true and useful kind of pulmonary exercise."

But phthisis is by no means the only affection which may be benefited by judicious mountain exercise and climbing. In the New York Medical Journal, of Feb. 26, DR. L. BARKAN, of Brooklyn, gives some very interesting information on this subject—interesting both on ac-

count of his remarks as to the value of pure air in the treatment of disease, and on account of the record of cases. The best inhalation apparatus, baths, and medicaments, he says, are of but temporary value if no compensation is made for the loss of vitality and of muscular tone, especially that of the heart and vessels; if the blood-stasis in the glands and other organs does not yield to an increased flow of blood in the arteries and veins; if the thinned blood does not become thicker and more rich in albumen; if the accumulating carbonic acid is not expelled by a more plentiful supply of oxygen; if the fat deposited in the body is not more rapidly oxidized; and if the kidneys are not made to act more efficiently. But all these effects are produced more certainly and more generally by mountain climbing than in any other way. Those who have had any opportunities for observation must know that after several weeks spent in mountain excursions the condition of the patient is changed, and radically, for the better—mentally and physically.

The cases reported by DR. BARKAN may be briefly given as follows: Man of 40 years, weight 230 pounds, circumference of waist 120 ctm., of chest 116 ctm. The first walk caused him to pant for breath so that he was almost obliged to stop every three minutes. On the second day the breathing was easier, and he had to stop every five minutes. The secretions were increased in amount, and the torpid condition of the bowels was corrected. The walk was lengthened each day. At the end of a month climbing caused but slight acceleration of the respiration, which was inaudible, he could walk for a quarter of an hour without stopping, and he could climb for four hours a day. The cardiac contractions were full and strong, and he had lost the feeling of oppression and dyspnœa. At the end his weight was 208, circumference of waist 107 ctm., and of chest 121 ctm. The second was an old case of neuralgia of the left facial nerve, resulting in numbness of the affected cheek. After a three weeks' excursion the numbness entirely disappeared, and has not returned. The third patient had suffered for thirteen years with rheumatism. At the end of two weeks of treatment he could climb hills, and after doing this for a week and a half his rheumatism had permanently disappeared. The fourth patient was plethoric and hypochondriacal, and had hæmorrhoids. Improvement was noticeable at the end of two weeks; after four weeks the hæmorrhoids had entirely disappeared. His weight was reduced from 211 to 185 pounds; his waist measure from 108 to 98 ctm., and his chest measure increased from 104 to 109 ctm. The fifth patient had chronic gastric catarrh. There was noticeable improvement after one week, and after three weeks the stomach was in good condition. A bronchial catarrh, which had given trouble, was much improved the first day, and disappeared on the third day. He gained fifteen pounds during his trip. In a sixth case psoriasis disappeared permanently in twenty-four days. In another case a chlorotic girl of 19, who had amenorrhœa, improved markedly in two weeks. In still another case a weak, hysterical woman, who had not menstruated for two years, was much stronger, not hysterical, and menstruated, after eight weeks of this exercise.—*Journ. Amer. Med. Assoc'n.* March 12, 1887.

THE IMPORTANCE OF EXCLUDING MEAT FROM THE DIET OF YOUNG CHILDREN.—Are young children under seven or eight years old best reared on a diet composed largely of meat, or is the best result attained by giving largely of milk, vegetables and the cereals, and reserving meat for a later period? It may reasonably be supposed that the delicate mucous membrane of the child, and the temporary teeth, which are called milk teeth, are best suited to the latter form of diet. It has been found, too, that the gastro-intestinal complaints so prevalent with children, especially in the summer, are infrequent in those from whose dietary meat has been omitted, and who are fed largely on milk. DR. CLONSTON (Practitioner, 1881, p. 221), after saying that he agrees with DR. KEITH, who has preached an anti-flesh crusade in the bringing up of all children up to eight or ten years old, continues, "I believe that by a proper diet and regimen, more than in any other way, we can fight against and counteract inherited neurotic tendencies in children, and tide them safely over the periods of puberty and adolescence."

A few facts are worth more than any *à priori* reasoning. These may be gleaned from the experience gained in the use of the following dietary of the Orphans' Home and Asylum of New York, which has been used without any material change for the past twenty-seven years. During this time the rarity of disturbances of the digestive organs has been remarkable, and the recovery of the children suffering from other diseases, such as scarlet fever, has been exceptionally rapid. Especially would it seem that this diet was suitable for those who show any tendency to disturbances of the nervous system, either inherited or acquired. The number of children is about 145. Children are not admitted under three years of age. Those over eight years old have meat three or four times a week with their dinner, and at those meals milk is omitted; otherwise the dietary is the same as for the younger children.

DIETARY FOR CHILDREN UNDER EIGHT YEARS OF AGE.

From November 1st to May 1st:

Sunday, Tuesday and Friday.—*Breakfast.*—Bread and milk.

Monday.—Oatmeal, steamed, and served hot with molasses.

Wednesday.—Hominy, steamed, and served hot with molasses.

Thursday.—Mush, hot with milk and sugar.

Saturday.—Wheaten grits, hot, with milk and sugar.

Sunday.—*Dinner.*—Bread, milk, potatoes, cabbage or pumpkin; sago or rice pudding. *Supper.*—Bread and milk.

Monday.—*Dinner.*—Bread, milk, eggs, potatoes, parsnips or spinach. *Supper.*—Bread and milk, stewed prunes.

Tuesday.—*Dinner.*—Bread, chowder of salt, codfish, potatoes, crackers and milk, cabbage sprouts or tomatoes. *Supper.*—Corn starch, with milk and sugar.

Wednesday.—*Dinner.*—Bread, milk, potatoes, onions, rice or bread pudding. *Supper.*—Bread and milk, stewed apples.

Thursday.—*Dinner.*—Bread, milk, eggs, potatoes, spinach. *Supper.*—Mush and molasses.

Friday.—*Dinner.*—Bean porridge, potatoes.

arsnips, carrots or turnips. *Supper.*—Bread
nd milk, stewed peaches.
Saturday.—*Dinner.*—Bread, milk, potatoes,
abbrge or onions, apple sauce.
upper—Hominy with milk and sugar.
From May 1st to November 1st:
Breakfast.—Bread and milk.
Sunday.—*Dinner.*—Bread, milk, potatoes,
sparagus, or other fresh vegetables, salt bacon,
roiled, rice or sago pudding. *Supper.*—Bread
nd milk.
Monday.—*Dinner.*—Bread, milk, eggs, string
eans. *Supper.*—Bread and milk, dried apples,
ewed.
Tuesday.—*Dinner.*—Bread, chowder of salt,
odfish, potatoes, crackers and milk, tomatoes,
esh fruit. *Supper.*—Corn starch with milk
nd sugar.
Wednesday.—*Dinner.*—Bread, milk, salt
acon broiled, onions, rice or bread pudding.
upper.—Bread and milk, stewed peaches.
Thursday—*Dinner.*—Bread, milk, eggs, pota-
oes, string beans, fresh fruit. *Supper.*—Mush
nd molasses.
Friday.—*Dinner.*—Bean porridge or salt cod-
sh, potatoes, tomatoes. *Supper.*—Bread and
ilk, stewed apples.
Saturday.—*Dinner.*—Bread, milk, potatoes,
sparagus, or other fresh vegetables, fruit.
upper.—Hominy with milk and sugar.
The following fruits may be given: Straw-
erries, raspberries, peaches, pears, currants,
lackberries, blueberries. No changes to be
ade in the dietary without the approval of
he attending physicians.—D. M. CAMMAN,
. D. in *Jour. Reconstructives.*

LVOFF ON VIBURNUM PRUNIFOLIUM IN THREATENED ABORTION.—In the *Meditz. Obzr.* No. 17, 1886, p. 437, DR. IVAN M. LVOFF, of Kazan, writes that the perusal of DR. J. H. WILSON'S paper (in the *Brit. Med. Jour.*, May 16, 1885, p. 978) has led him to try black haw (*Viburnum Prunifolium*) in fifteen severe (non-syphilitic) cases of threatening and incipient abortion. Nine of them were cases of habitual abortion. The remaining six cases came under the treatment with all the symptoms already fully developed, such as violent hæmorrhage, shortening of the uterine cervix, a commencing opening of the os, and slight spasmodic pain in the womb. Viburnum was used in the shape of a dry extract, in powder or pills, 2 grains four times daily; sometimes when severe uterine pains were present, ¼ grain of opium was added to each dose of viburnum. The patients bore the drug quite well, no unpleasant by-effects being observed. The results were most satisfactory; in none of the cases treated by the black haw, abortion ensued. In many cases of habitual variety in pauper women the latter remained all the time on their legs, attending to their domestic work (of a lighter kind). They took nothing but viburnum. And, nevertheless, hæmorrhage ceased, and pregnancy went on towards its normal termination. Three cases are adduced in detail for the sake of illustration. In one of the patients, a scrofulous woman, aged 37, in whom of six former pregnancies the three last had terminated by spontaneous abortion on the twelfth week, and who had been seen by DR. LVOFF in the ninth week of her seventh gravidity, amidst all usual symptoms of commencing abortion, everything returned to the normal about the sixth day of the treatment, which was continued more than a month for the sake of precaution. In another woman, in a footman's wife, aged 31, in whom, of eight gravidities, the six last had been spontaneously interrupted about the third month, uterine pains disappeared, and hæmorrhage was controlled after a two days' use of the drug and rest in bed; viburnum was given her for five successive weeks. In a third woman, a veterinary surgeon's wife, aged 23, in whom two first pregnancies had terminated normally, who had been seen on the thirteenth week of a third gravidity, about five hours after the appearance of a griping uterine pain and considerable hæmorrhage (caused by driving in a 'bone-shaking' vehicle), and in whom the author had found a shortened cervix and dilated os through which the ovum could be easily felt, the improvement was so rapid and complete that the patient got up on the second day of the treatment. As the reader expects, DR. LVOFF warmly recommends an extensive trial of this useful drug.

IS IODOFORM ANTISEPTIC?—The widespread employment of iodoform as an antiseptic dressing may receive a check should the conclusions arrived at by MM. HEYN and ROVSING, of Copenhagen, be confirmed. These observers have (Fortschritte der Medizin, 1887, No. 2) been making experiments with iodoform to test its value as an antiseptic, which they point out is so generally accepted that the surgeon does not hesitate to employ a non-sterilized spatula or to insufflate ordinary air with the powder, procedures which he would shrink from employing were it not for the belief that the iodoform can destroy the germs adhering to the one or suspended in the other. Yet, as iodoform is rarely used to the exclusion of other antiseptics (as carbolic acid or mercuric chloride), there is never much opportunity, clinically, of testing its germicidal properties. MIKULICZ, in 1881, tested the action of iodoform upon putrefaction, but with no definite result; and RUMNO'S experiments in 1883 were complicated by his use of oil of turpentine as a solvent for the iodoform. MEYER found in one case of abscess that iodoform had no effect in reducing the virulence of the pus, and in another that it had a slight action. The results of the research pursued by by MM. HEYN and ROVSING surprised themselves. Acting on the theory that it is through liberation of free iodine that iodoform enjoys its germicidal reputation, they prepared solutions of iodoform in olive oil and in serum, and, having sterilized them, mixed them with culture media, and studied the effect of cultures of various bacterial organisms in these mixtures, as well as under iodoform powder alone. They also experimented on rabbits by mixing inoculation fluids with iodoform. The details of the experiments need not be reproduced here; suffice it to say that in no case did the presence of the substance interfere with the development of micro-organisms. So that they conclude that as an antiseptic its employment in surgery is valueless. But, more than this, its use is dangerous, for, as two of our experiments proved, iodoform itself may contain pathogenic micro-organisms: and even if all care be taken to purify it, yet it may become the medium of the

conveyance of pathogenic germs introduced into it through the spray or spatula. We trust that these experiments, which have received such prominence, will be repeated, for, if confirmed, we can imagine that the use of iodoform (apart from any other antiseptic) would in certain circumstances be serious. It would be deplorable if in any such case the material upon which the surgeon relies to protect his patient from bacterial invasion should prove to be the means whereby such invasion occurred. The writers of the article themselves advise that before using iodoform (which is valuable as a dressing on other grounds than as an antiseptic only), it should be disinfected in sublimate solution.—*Lancet*, Feb. 12, 1887.

SHOULD TRANSFUSION OF BLOOD BE PRACTICED AS A RESTORATIVE MEASURE.—DR. KLOPSTECK, a staff surgeon in the Prussian army, in a painstaking and interesting work, describes the various changes which the doctrine of transfusion has undergone in the course of time, and shows how enthusiasm at one time has given place to indifference and even condemnation at others.

He undertakes to give a thorough criticism of the indications, the method, and the result of transfusion with regard to the latest investigations, and finally sets forth the following weighty conclusions:

1. Death from hæmorrhage does not result from too great loss of blood corpuscles, but through the disturbance of distribution of blood in the vascular system.

2. In a sudden loss of blood, death occurs when there is still sufficient blood remaining in the system to sustain life.

3 The direct transfusion from one person to another is very difficult to carry out, on account of the want of suitable and willing agents to supply the blood.

4. The blood of lambs and other animals is not suitable for transfusion into man.

5. Blood that has gone through any form of withdrawal can not be made a proper substistitute by transfusion.

6. A direct nutrient action of the transfused blood upon the tissues of the receiver of it does not exist.

7. There is no danger of plethora connected with the direct injection of blood into the vascular system.

8. Depletory venesection in transfusion is useless and harmful.

9. The transfused blood undergoes more or less prompt destruction, and the appearances first cease with its complete removal.

10 The pressure of hemoglobin is an excellent sign for the recognition of the dissolution of red corpuscles in the system.

11. Blood and serum from different species of animals possess different degrees of destructive influence on the blood corpuscles of other species.

12. The property of producing fever by fermentation of a given specimen of blood differs in degree, according to the character of the process of defibrination; it is absent in none.

13. Transfusion of blood is to be discarded.

14. Infusion of chloride of sodium is a harmless agent for the restoration of the necessary vascular pressure after sudden profuse loss of blood.

15. The infusion of solutions of chloride of sodium is more easily borne than infusion of blood.

16. Statistics confirm this opinion of the infusion of chloride of sodium and its indication for acute anemia.—*Deutsche Med. Zeit.*

THERAPEUTIC VALUE OF ERGOTINE.—A European physician, DR. SAVITSKI, observes that ergotine has been used with success in the treatment of many affections—e. g., by VIDAL in prolapsus recti, by HUNT and PEPPER in diabetes, by SAUNDERS, MURRELL, and NOAKES in diabetes insipidus, by ALLAN for the cough in some lung affections, by GRANZIO in obstinate constipation. by GAULDMEL in the night-sweats of phthisis, by DE MARTINI in spermatorrhœa, by DE MANGE in some forms of typhoid fever, and by GIRMA in general paralysis. It has also been employed in chorea and dysentery. The theory of its action in these diseases he does not pretend to expound, but he calls attention to the similarity of the action of quinine and ergotine. Both, he says, undoubtedly cause contraction of the uterus and the spleen, the effect of quinine on the uterus having been scientifically worked out in a dissertation published by T. T. SMOLSKI in 1876, and that of ergotine on the spleen having been shown by DOBODCHIKI (*Vrach*, 1880), and by SEMCHENKO (*Vrach*, 1883). This similarity led him to think that one of these drugs might serve as a substitute for the other, and he therefore made a large number of observations on the effect of ergotine upon the cases of intermittent fever occurring in the Lubinski regiment with excellent results, especially where an enlarged and tender spleen was present. He finds that a combination of ergotine with quinine acts very satisfactorily, and that in this way considerable quantities of quinine can be saved, as half the dose of quinine which would be required if given alone will suffice if combined with ergotine. The preparation of ergotine used was BONUEAN'S, the dose in chronic cases being about a grain three times a day.—*Med. and Surg. Reporter.*

BICARBONATE OF SODIUM IN THE TREATMENT OF GONORRHŒA.—The copious discharge which is so marked a feature in gonorrhœa is invariably acid in reaction, and this fact has even been suggested as a test for the nature of the disease. The specific bacillus, moreover, to which gonorrhœa owes its ready and peculiar infectiveness, can only flourish and multiply in an acid medium. Considerations of this kind have led DR. CASTELLAN, a French army surgeon, to try the effects of alkaline injections into the urethra in gonorrhœa. The results obtained are reported by him to have been excellent. He begins by testing the reaction of the discharge, and then, if acid, injects a small quantity of a one-per-cent. solution of bicarbonate of sodium, the least irritating of the alkaline salts, repeating the injection several times daily. Under this treatment, the scalding accompanying micturition is at once alleviated, and in the course of a week a very marked diminution is brought about of the discharge. Convalescence was generally rapid, and the final results very satisfactory. The treatment is also applicable to gleet. The good results

alleged to have been obtained naturally require to be confirmed by experience before we can call on our neighbor to rejoice. Reiterated disappointment has begotten scepticism, but the plan of treatment has the great merit of being inexpensive and absolutely free from risk. Even if the specific action of the alkaline solutions be not justified by observation, nothing but good could follow the employment of a weak solution of anything.—*Med. Press and Circular.*

A Successful Treatment of Acne.—Dr. John T. Metcalf thus writes in the *Boston M. & S. Jour.*:

Judging from my own experience, I do not think the ease with which the acne, whether of the sebaceous, pustular, or papulous form, is curable by external means, is generally very gratifying to patient and practitioner. For the last seven years I have not failed in a single instance to cure the ten or twelve cases which have come under my observation.

Some have been of long standing and of great severity. The last very bad one was facial, and so disfigured the doctor to whom the face belonged, that he only went into society with the greatest reluctance. When I told him I felt sure he could be greatly benefited, and that I thought he could be cured, he said he had given up all hope of amendment, and had made up his mind to practice philosophy in accepting the inevitable.

I met my confrére a week ago, and actually failed to recognize him at first, so entirely free was his face from the disfiguring acne.

I was led to employ chrysophanic acid in these cases, by learning what it had effected when used as an ointment in treating chronic psoriasis. My habit is to begin with an ointment made of three grains of the acid to an ounce of vaseline. The face is well washed with soap and dried, at night. Before going to bed, the parts in which acne exists are well rubbed with the ointment, and this is repeated every night, until a sharp dermatitis with scarlet skin is produced. Inunction then ceases, until disappearance of the artificial inflammation of the skin, when a repetition of the ointment is made, under conditions above stated. —*Med. and Surg. Reporter*, Mar. 5, 1887.

Medical Uses of Spartein Sulphate.—A Russian writer, Dr. Gluzinski, gives the results of some observations, both physical and clinical, on the action of sulphate of spartein. Its main action is to slow the heart; besides this it raises the blood pressure. On cold-blooded animals it acts with a greater degree of intensity than on mammalia. The action on mammalia may be divided into three periods or stages, during the first and last of which the effects are more marked than during the second. Indeed, in some cases the heart is even quickened during the secon period. This may be explained by the existence of some abnormality or pathological change in the irritability of the vagus or of the heart muscle. The reflexes are at first increased, afterwards diminished. Death occurs from asphyxia, and is due not only to the effect on the medulla, but to that experienced by the respiratory muscles. The therapeutic use of spartein is limited to the first stage of its action. Its value consists in the rapidity with which it acts. In some cases within an hour after the first dose the pulse begins to improve, as well as the subjective sensations of the patient, and no irregularity is produced. Spartein has not so powerful an action as digitalis. It may, however, be useful in cases where the condition of the patient renders it unadvisable to wait for the more tardy effect of digitalis, and it may therefore be used as an adjunct to the latter drug, besides which it may be prescribed where circumstances exist which contraindicate the use of digitalis.—*Idem.*

On Eulyptol and its Internal Administration.—Under the name *eulyptol* (not "eucalyptol") Schmeltz designates a remedy prepared from salicylic and carbolic acids, and essence of eucalyptus—six parts of the first named and one part of each of the others. This preparation may perhaps be useful as a surgical antiseptic, but when administered internally in doses of from eight to ten grammes (ʒ ij to ʒ iiss), it can only act as an antipyretic. With this view Schmeltz has prescribed it in rheumatism, in which malady the eulyptol, because of the salicylic acid constituent, lessens the pain and joint swelling. By its use typhoid evacuations are disinfected and modified in character. It has also proved useful in catarrhal affections of the respiratory organs. It is soluble in alcohol and ether, but less soluble in water. It does not cause so much stomach pain and flatulence as the salicylates.—*Amer. Jour. Med. Sciences.*

Fluid Extract Banana Root in Bronchocele.—Dr. F. Frankenstein of Hillsboro, Kansas, sends us the following notes of a case of enlargement of the thyroid gland relieved by fluid extract banana root: On December 24, 1886, Mrs. Eva Schmidt, 45 years old, called at my office. The thyroid gland being very much enlarged, since childhood. Over 40 years ago she has been treated by a doctor in Russia, and the enlargement then diminished a good deal but had never disappeared entirely. Four years ago it commenced to increase in size again and quacks treated the case in vain.

I gave her a small sample bottle Fl. Ex. Banana Root with the advise to take 15 drops every three hours; and when I saw her again on the 9th of February, 1887, I was astonished to find the enlargement reduced to half of its former size.

Catharsis Produced by Hypodermic Medication.—Drs. Dudley and Castle, in a recent communication, express their belief that one or more agents have been found which will produce free catharsis when administered hypodermically. One of these is cathartic acid, an amorphous substance, nearly insoluble in water. Experiments were made with it on animals, and some of the results obtained led them to think that when a better knowledge of its solubility and dosage is acquired, it will answer the purpose of a catharsis producing agent when administered under the skin. As there are frequently cases in which a loss of

time is sustained by the administration of cathartics by the mouth, and rectal injections fail to answer the purpose, the existence of some method as the above will be recognized as playing an important part in therapeutics.—*Weekly Med. Review.*

Rusch on Apocynum Cannabinum.—The Apocynum cannabinum is a herbaceous and perennial plant belonging to the family of the Apocyanaceæ, which flourishes in the United States, where it is known under the name of Indian hemp. The root has been used for some time past in America; it contains tannin, resin, and the substances containing the same properties as digitalis, *apocynine*, and *apocynum*. Dr. Rusch's attention was attracted to this plant, owing to its valuable properties as a hydragogue, in arresting serous effusion of the pleura and peritoneum. This substance is both tonic and diuretic, valuable in generalized anasarca, and in dispersing serous effusion or deposits in cavities. A decoction is made of 4 grammes of the bark to 250 grammes of water; and a dose of 30 grammes is given every six hours.—*London Med. Record.*

The Use of Cocaine in Coryza.—Dr. Amory Chapin, of this city, writes: "I desire to attest to the beneficial results of cocaine in acute coryza. I have used the cocaine solution on a number of patients with throat and nose disease, who have been and are subject to 'cold in the head,' and have prescribed for their own use the 4-per-cent. solution of cocaine whenever they were troubled with the disagreeable affliction, and it has been almost universally successful, often aborting the disease. I have found the combination of 'Dobell's Solution' with the cocaine work better even than the cocaine alone. I advise the use of the combination solution in an atomizer (hand bulb), and recommend that the solution be warmed to an agreeable temperature before being used in spraying the nares."—*Med. Record.*

On the Use of Vaseline in Antiseptic Hypodermic Injections.—Vaseline and analogous bodies undergo easy diffusion in human tissues, the rapidity of absorption depending on their consistence, which varies from that of an ether to that of wax. This property is preserved when they contain a germicide in solution. The principal antiseptics experimented with were disulphide of carbon, carbolic acid, camphor, creosote, salol, iodoform, thymol, eucalyptol, etc. The vaselines must be pure, and not discolor on the addition of sulphuric acid. They are at present being tried in the treatment of sinuses, fungosities, tuberculosis, and cysts, etc. If the vehicle and the substances employed are pure, no inconvenience follows their use, but otherwise an abscess is probable.—*London Med. Record*, Feb. 15, 1887.

Hypodermatic Injection of Atropine in Hæmoptysis.—Hasmann advises this method of treatment in desperate cases of hæmoptysis when the use of other remedies has failed. He reports three cases which illustrate this point. One case has suffered from twelve severe hemorrhages in six hours. After the thirteenth the writer injected one-twenty-fifth of a grain of sulphate of atropine; the hemorrhage did not recur. A similar result was obtained with a lady, in whose case ergotine and preparations of turpentine had failed.

In a third case of persistent hemorrhage through two winters, two injections, of one-twenty-fifth of a grain each, sufficed to check them.—*Revue Générale de Clinique et de Thérapeutique*, February 18, 1877.

A New Disinfectant.—Carbolic saponate is the name given to a new potassium soap containing from 5 to 10 per-cent. of carbolic acid. It is recommended as an excellent means for disinfecting furniture, wooden articles, linen, water-closets, night utensils, etc., and especially for washing the hands before and after operations, or after contact with infectious patients. By its use in the latter operation it is said that the skin is rendered smooth and soft, and no irritation whatever is produced. According to Dr. Stroganoff, of Odessa, however, carbolic saponate possesses slightly irritating properties.—*Brit. and Col. Druggist.*

Cocaine as a Cardiac Stimulant.—Prof. J. M. Da Costa, in a clinical lecture, published in the Philadelphia Med. Times, Feb. 14, 1887, reports the use of cocaine hydrochlorate, ¼ grain, subsequently increased to ½ grain every 2 hours, in a case of feeble heart following typhoid fever. The patient's improvement was immediate and marked, though ordinary stimulants had had no effect. The cocaine was gradually reduced, and stopped entirely in one week, the patient all this time rapidly improving.

A Remedy for Epilepsy.—

℞ Extr. fab. Calabar, gr. vijss.
Spir. æth. f ʒ jss.
Aq. amygd. amar. (sive aq. menthæ pip.)
f ʒ vss. M.

Sig.: Five to eight drops t. d. for children; eight to fifteen drops t. d. for adults.—*Pharm. Zeitschr. f. Russland.*

Salol in Sciatica.—Dr. V. Aschenbach, of Corfu, reports in the Fortschrith der Med. that, suffering from sciatica, for which all known remedies has been tried in vain, he at last resolved to try an unknown one—to himself at least unknown as a remedy for sciatica. In the evening he took a dose of half a gramme, and at midnight one gramme, after which he fell asleep, and remained perfectly free from his pains.

The Medical Age.

Vol. V. DETROIT, APRIL 11, 1887. No. 7.

Original Articles.

THE CLIMATIC TREATMENT OF DISEASE.*

BY JOHN A. ROBINSON, A. M., M. D., CHICAGO.†

There is probably no field in therapeutics in which the general practitioner becomes so quickly lost as that of the climatic treatment of disease. He seldom has the time or opportunities to investigate the subject personally, and what little knowledge of the subject he possesses has been gleaned from the voluminous literature written by various authors on this topic. Even this knowledge is ill-defined There is a great difference of opinion among writers on climatology as to what should be the altitude, temperature, dryness or moisture, etc., for the treatment of various pulmonary diseases. The purpose of this and following papers will be to formulate the desiderata for climates in the treatment of various pulmonary diseases.

Inasmuch as phthisis pulmonalis constitutes the largest class of these diseases, we will first briefly note what eminent authorities say are the requisites in the climatic treatment of this disease.

I quote the opinion of DR. C. J. B. WILLIAMS: "Our great object in consumptive diseases is to give the patient as pure an atmosphere as possible, of such thermometrical, hygrometrical, and other qualities, that it can be breathed safely and freely by him. It should therefore be free from extremes, humid or dry, and neither too still nor too windy, and its influence on his frame should be furthered by frequent exercise of various kinds carried out in cheerful sunshine, uninterrupted by rainy, misty, or windy weather. For consumption originating in septic influences, a climate of great pureness and dryness would seem to be indicated, and this is to be found at considerable heights above the sea level."

PROF. LUDWIG BUHL, of Munich, a high authority on tuberculosis, says: "For commencing or already established chronicity, the (I might almost say) *principle cure is pure air.* There must be plenty of air, and it must be free, properly changed, without dust, rather dry, and not subject to great changes of temperature: this latter is particularly necessary in a medium degree of moisture. The residence should be in a spot well sheltered from the wind, and on well-drained soil, with large, airy rooms. South of the Alps (in Europe), if possible, and during the summer, an elevation of from 2,500 to 3,000 feet should be sought. In the spring and autumn this may be changed for an elevation of from 1,500 to 2,000 feet. In the winter the patient may dwell either near the sea, or at an elevation of from 500 to 1,000 feet."

DR. J. HUGHES BENNETT says: "What is really required is a cool, temperate climate, which should range from 55° to 66° F. during the day, and 45° to 55° at night. The air should be dry or with only slight moisture, little rain, and a clear, bright sun. Such an exhilarating climate, in which exercise can be taken almost daily in the open air during the winter and spring months, is the best for the consumptive patient."

From the opinions of these authorities we can tabulate certain facts:

1. The climate must be such as to insure *pure air free from dust or poisonous germs.*

2. Such air is more apt to be found at an elevation of 1,000 feet, or more, above the sea-level.

3. There should be an equable temperature, neither too warm nor too cold, the air should be in continuous motion and yet there should be no wind storms.

4. There should be plenty of sunshine.

5. The landscape should be pleasing.

6. The health-resort should be easily accessible and home comforts with congenial society easily obtained.

7. The patient should be able to take almost daily outdoor exercise without fatigue.

When patients are able to find homes in climates which nearly fulfil all these conditions, clinical observations demonstrate that consumption may not only often be arrested, but cured. It is a well-known fact in mycology that a modification of the environment often prevents bacteria from thriving and multiplying, and this may account for the improvement which often follows the residence of a consumptive in a pure climate where he can take exercise. Bodily nutrition is increased, the power of resistence to disease is augmented, and the germs of consumption die. The disappearance

*Read before the Chicago Medical Society, February 7, 1887.

†Attending Physician for Throat Diseases, Presbyterian Hospital; Attending Physician Cook County Hospital.

of the disease is heralded by the improvement of the appetite and the digestion, the increase in force of the circulation, the stimulation of the respiratory functions with increase of normal oxidation and bodily heat. Thus with the improvement of the general bodily nutrition is favored that condition of the lung where there is absorption of the inflammatory exudates present in incipient phthisis, or the formation of cicatrized tissue in the latter stages of the disease.

Having thus considered the climatic conditions favorable for the treatment of consumption, we wish to pass in review the claims which certain localities in the United States present as being suitable places to send consumptive patients. The first locality we will notice is Asheville, N. C.

In western North Carolina, between the Blue Ridge on the east and the Alleghanies on the west, lies one of the most picturesque valleys in the South. In this valley is the village of Asheville. It is on the line of the Western North Carolina Railroad and has about 5,000 inhabitants. It has long been known as a summer resort, and for this reason its popularity as a health resort has not grown rapidly. But there are many reasons why it should attract the attention of the profession more. In the first place the altitude of Asheville is 2,250 feet above the sea-level. The air in the summer is pure, cool and invigorating, and in the winter mild on account of the latitude. The climate is pleasant and salubrious. There is a large proportion of sunshiny days, so that outdoor exercise can be taken daily, except when it rains. After a rain it is not easy to take exercise on account of the clay soil retaining the moisture for some time. However, the precipitation of moisture is quite evenly distributed throughout the year, being excessive at no time. What little snowfall there may be seldom remains long, even on the mountains, and its stay in the valley may be measured by hours.

The average rainfall, in inches, of the different seasons for a period of eleven years is shown to be as follows:

Spring	10.1 inches.
Summer	13.5 "
Autumn	7.1 "
Winter	9.5 "
Total	40.2 "

TEMPERATURE.—The record at Asheville shows the following mean temperature for the seasons:

Spring	54.3 deg. F.
Summer	71.3 "
Autumn	55.3 "
Winter	27.2 "
Yearly mean	55 3 "

In a series of nine years the mercury did no rise above 90° F. any day in the summer. Du ing this season the nights are always cool, pe mitting refreshing sleep. In winter it is ver seldom that a zero temperature is reache while the air is comfortable, dry, clear and i vigorating.

DR. O. H. MARCY, of Boston, who has pe sonally investigated the claims of this regio says he has sent a large number of patien there with excellent results. And there is n wanting testimony from many physicians wh have seen the benefits which result from a re idence there during the spring and summe months.

However there are places more accessible t persons living in the North. One point that easily reached by Northern tourists is Mariett Ga. This village is on the line of the Weste and Atlantic Railroad, about twenty mil northwest of Atlanta and 120 southeast of Cha tanooga, Tennessee. Its altitude is 1,132 fee About ten miles from the town is the Kenn saw Mountain from whose top Gen. Sherma made the famous signal to Corse: "Hold th fort; for I am coming." This mountain has a altitude of 1,800 feet. The scenery about Mar etta is delightful. For outdoor excercise o can take pleasant rambles, or can secure goo livery at low figures and take the most deligh ful drives. If the rural scenery becomes t monotonous one can go to Atlanta, which one of the most beautiful cities in the Sout But for amusements it will seldom be necessar for the invalid to leave the village, for the pr prietor of the Whitlock House, the health r sort at Marietta, is ever providing for the soci enjoyments of his guests by excursions, drive etc. The air is so fresh and invigorating tha the temptation to take outdoor exercise cann be resisted. Malaria is unknown. The drin ing-water is pure, as has been attested by PRO W. S. HAINES, of Rush Medical College: "Th specimen of water from Marietta, Ga., submi ted to me for examination, has been careful tested and found to be of excellent quality f drinking purposes. It contains but a sma amount of mineral matter and only a trace organic compounds."

The Society of Marietta is composed of cu tured, kind-hearted and hospitable peopl And the fact that most interests the invalid that here can be found all home-comforts. is not a place where the necessities, not me tioning the luxuries, of life are absent.

The temperature of Marietta is mild throug out the year. In 1885 the lowest mean mont ly temperature was in January, 30.3° F. T yearly mean temperature was 59.4° F. Duri the winter of the same year there was no sn at Marietta. Snow seldom falls and only mains a very brief period. Of course this pla is as yet little known, and yet it would seem

afford a place where those who wish to find a quiet home where the climate is pleasant, where the air is somewhat rare and pure, and where outdoor excercise can be taken, can live comfortably.

However, a large number of consumptives, when they go to a quiet health resort, suffer from home-sickness, and become so despondent that they refuse to take the excercise so essential as a remedial measure in this disease. If they could find a locality where there is a combination of all the requisites of a perfect climate for consumptives, and also the opportunity to enjoy city life with all its attendant evidences of civilization, they could be placed under the ideal requirements for treatment. The only locality that I know of where there is the possibility of such a combination is Lookout Mountain, Tenn. This mountain has been memorable since Hooker fought his battle on its summit in mid-air, but it is only recently that it has been thought to be desirable as a health-resort. For this reason we cannot give any records of temperature, humidity, etc. But it matters little, for temperature charts do not always prove to be of much value. Again, we cannot give extensive statistics as to the benefit to be derived from a residence on this mountain, but we can enumerate the features which will commend themselves to all fair-minded physicians as those demanded in health resorts for consumptives.

This mountain has an altitude of 1,500 to 3,000 feet. The altitude is somewhat greater than that of Marietta or Asheville. The advantage in this is that it insures a greater purity of the atmosphere and increases the activity of the respiratory functions. As for the scenery that greets the eye of the observer as he stands on this elevation, it is not in our power to give you a word-picture of it. Suffice it to say, that to the lover of nature are presented views of which he will never weary, nor forget. Daily rambles over the sides of the mountain disclose new beauties in the landscape, and urge one to take the wonted exercise.

The sunshine is abundant, and the temperature, even in winter, seldom is low, as is evidenced by the fact that during this winter there has been almost no perceptible snow on the mountain.

Recently there has been completed a cable railroad winding up the mountain, thus connecting it with Chattanooga. The trip from the top of the mountain to Chattanooga can be made in twenty-five minutes. This enables one to live on Lookout Mountain and transact business, attend church or places of amusement, or do shopping in Chattanooga.

Chattanooga is now a busy, enterprising city of about 30,000 inhabitants, having doubled its population in the last twelve years. Northern enterprise has invaded the city, and the result is a grand development of her resources. Wealthy residents are building their suburban residences on Lookout Mountain, and the construction of the cable road was the outgrowth of the demand for building spots on the mountain. And yet this will prove a boon to sickly humanity. It enables the consumptive patients of the North, South, East and West to go to a place where are as nearly combined as it is possible on earth all the requisites for a climate in which consumptives should live. On Lookout Mountain cottages can be built in which patients can reside the year round. The cottage-hospital plan secures to the inmates quiet, purity of air, such temperature in each room as each patient demands, home comforts, especially when the patient's family is along, and independence of action. By a residence on this mountain there are secured the following advantages:

1. Purity of air.
2. A proper elevation above the sea-level.
3. Equable temperature, and air in motion, yet no wind-storms.
4. Sunshine.
5. Outdoor exercise, pleasing landscape, home-comforts and the advantage of close proximity to a city.

That these advantages can be secured is not merely an assertion, but fact that is susceptible of proof, and in due course of time the proof will be forthcoming.

DISCUSSION.

DR. JOSEPH P. ROSS said: I am called upon to open the discussion of the treatment by climate of consumption, one of the most frequent and fatal diseases that afflict our race. Statisticians tell us that more than three million persons die annually of this disease. DR. G. B. WOOD, in his "Practice of Medicine," states that north of the tropics one-sixth of all deaths are caused by this disease. And upon consulting ZIEMSSEN I find that the author of the article on consumption makes the statement that two-sevenths of all the deaths in the world are caused by pulmonary tuberculosis. Since this disease is so general, and since treatment by medicine does not accomplish as much as hygiene, which includes climatic treatment, it is very important that we discuss the subject.

In the excellent paper read by DR. ROBINSON at the last meeting, he quoted the opinions of three leading medical men with reference to the kind of climate which is appropriate for the treatment of consumption, and I think their views with reference to the appropriate climate, which were adopted in the paper, are correct. From my study and observation of the effects of various climates upon tubercular patients, I believe that, although you cannot say any particular climate is suitable for every

case, you can say that for cases in general the air should be pure and dry, should be neither too hot or cold, should not be variable, and should be somewhat rarefied; for instance, such an air as would exist at an altitude of from 1,000 to 3,000 feet above the sea-level, and lastly, the air should be invigorating, because of its containing an additional element, probably ozone. It may be that this invigorating quality is due to an *electrical* condition of the air, but I think it is more likely due to ozone. I waive the discussion of each of these elements appropriate to a good atmosphere, but will speak more particulary of different localities that are known as health resorts, and will state what facts my experience and study has taught me concerning these localities.

In the first place, I will briefly refer to Colorado. Twenty years ago I began the study of the Colorado climate. You will remember that at that time the eyes of the medical profession were turned to this region as offering the best promises for a good climate for tubercular patients. I thought that in Colorado we have a climate where there is a pure, bracing air, with an altitude high enough to secure rarefaction of the air sufficient to invigorate the respiratory functions. I sent a large number of patients there, and the following is an almost typical history of the course many of these cases took: Mrs. H. had been ailing six weeks. Her symptoms were cough, profuse expectoration, fever and night-sweats. Physical exploration revealed a consolidation of a limited area in the apex of the right lung, supposed to be tubercular. This exudation did not extend much below the lower border of the second rib. Being in affluent circumstances, she was sent to Denver, where she was surrounded by every comfort and luxury. She embraced every opportunity to improve her health. In two months she returned to Chicago, her strength having improved, and having gained eleven pounds in weight. To all outward appearance her recovery seemed assured, but on physical exploration of her lungs I was surprised to find that the area of consolidation had extended until it involved almost the half of the right lung. She went to Denver again, but did not improve much. She remained there about two months and returned with the exudation rapidly breaking down, and only lived two or three weeks after her return home. I have observed this fact: that while the patients seem to improve in their general health, the exudate increases rapidly, and if softening occurs it takes place also very rapidly. This is probably due to the high altitude. I have also observed that in the high altitudes patients who have a tendency toward hemorrhages are apt to be unfavorably affected in this way. Therefore, in the later stages of tuberculosis, the high mountains of Colorado and New Mexico are objectionable. For this reason I carefully selected all cases that I have advised to go to Denver, Colorado Springs, Pueblo, Raton Pass, Las Vegas, Santa Fè and Albuquerque.

I next selected San Antonio, Texas, as a health-resort, and sent patients there for a few winters. During the first winter some seemed to improve, but a large number of them complained that the sudden cold winds from the north, or "northers," as they are called, caused severe attacks of bronchitis or pneumonia. In the spring or summer there is a great deal of malaria. But barring the northers and malaria, a great many cases do very well there, and during the months of December and January I believe it is a very good climate for consumptives. But during the summer months the heat has too depressing an influence on the patients. While I believe that in January the patients were a little better in San Antonio than in Chicago, still they did so poorly that I stopped sending any patients to Texas.

I sent many to California, and, all things considered, I think the best climate and opportunities for treating this disease are found in California. I sent a brother, a son, and a servant boy with advanced consumption to Long Valley, California, all of whom recovered. I had quite a number of patients who recovered in the valley north of Virginia City, just below the summit Range. And a number of my patients regained their health on the other side of the range, in the foot hills of the Sacramento valley. With reference to Southern California probably for two months of the year it would be desirable to send patients down to Los Angeles, Riverside or San Diego, but taking that climate all the year round it is not the place, because the air does not contain something that should make it essentially invigorating: it is not light enough, and seems to lack ozone. I think patients affected with ordinary catarrh will do well there, but consumptive patients do not improve in Southern California all the year round. If one could live in the southern climate for two months in the year and then go up into the Sacramento valley where you can find almost any altitude, I think probably it would then be the best climate for cases of consumption in general on the continent. One objection to sending patients there is the distance from Chicago.

Afterwards I made a study of the Gulf coast and Florida, and after going all over and investigating these regions, but Florida more especially, I hold the same view in regard to that climate that I obtained when I was there last year. I visited Palatka, on the St. John river, and called on Judge B. and asked him what kind of a climate for consumption they have in Florida. "Well," he said, "I will express my views candidly. If you want to send your consumptive patients down from Chicago

o have them put in the ground, send them long." I think the climate of Florida is a ailure for the treatment of consumption, for his reason: patients go there having a cough, eing debilitated by disease, and the air is alny, and they say, what a beautiful air. hey do not cough so much, but they sit round and take no exercise, for there is noth- ng to cause them to take active exercise. here is something lacking in the air; it does ot brace one up, and I never saw a patient here that improved the least from day to day. he atmosphere is warm and moist, and very epressing, while malaria abounds.

With reference to the regions mentioned by R. ROBINSON, I have investigated the climate f the mountains of Tennessee, Georgia and orth Carolina, and have been to the places entioned in the paper: Asheville, N. C., arietta, Ga., and Chattanooga, Tenn., and lly agree with the remarks made by the uthor. I think the climate of these regions is uitable for the treatment of consumption. I hink it is well for us to consider the favorable eatures of this mountainous region of Tennes- ee, Georgia and North Carolina, which is alled, and I think correctly, the Switzerland f America. In the first place, let us contrast he climate of that region with ours at the ime of year when our climate is bad. It is in he spring, from the January thaw until June, hat our climate is bad; the latter part of win- er and spring. Now, it is a fact that at an ltitude of 6,000 feet above the sea level, as at Denver and Colorado Springs, the air is too old, and when we have bad weather here you ill find bad weather in Colorado, extending rom the January thaw until near June. During these months when our climate is bad, ou consider the question of sending patients way from Chicago. In Great Britain and the orth of Europe they consider that the bad ime of the year is from January to June, and hey send patients down where the Alps dip nto the Mediterranean Sea and where they nd the climate mild, about the same conditions f climate that we have down South. All the est of the year we have a good climate; in fall, mmer and early winter, the Chicago climate not bad, it is only in the spring, and then ou want to consider where you should send our patients. You might send them to Texas, nd it may be that in January they might be a ttle better there, but for the whole time it oes not seem to me they have a climate with hich they succeed in curing patients. You ight send them to California, but if you do ot want to send them so far away, the other calities mentioned in this paper are good aces. I endorse what was said about the vorable climate in the South. I have spent ring, summer and winter months down there. d I find that at an altitude of from 2,000 to 3,000 feet above the sea-level you have a good climate, and it is near home, and so convenient that if anything should happen friends can go to the patient, or he can return home, in a few hours, which is another reason why we should think favorably of this latitude. During the past fifteen years I have had considerable experience in sending patients to these regions, and they return as much improved as I ever had them return from any other point on the continent. I have had patients go to Chattanooga when they were not able to climb Lookout Mountain, and they would come back wonderfully improved. I felt deep regret four years ago at sending a lady down there, for I did not believe she would ever return alive. I knew she could not live here three week, having all the symptoms of advanced tubercular trouble, with almost complete consolidation of the lung, but in four months she came back almost cured, and to-day I met her on the street, and she is to all appearances robust and healthy. The question comes up with reference to the most desirable points. Asheville is in North Carolina, and it takes a day and a half to go there: Marietta takes thirty-two or thirty-three hours to reach, while it takes twenty-one hours to go to Chattanooga. I think as Chattanooga is a little nearer home, it would be desirable to try that point, and if that does not suit the patient he can move on to Marietta. On Lookout Mountain the scenery is perfectly grand and beautiful, and lends an interest to a residence on the mountain. The scenery is varied from every point of observation. There is another thing—as they have a cable railroad on the mountain, if you get tired you can run down into Chattanooga, a town of 30,000 inhabitants (and in a few years they will have 50,000), in a few minutes.

I have no personal interest in the matter, but I wish to say that MR. and MRS. CARTER, of Chicago, have rented a most beautiful home on Lookout Mountain and will run it as a health resort. They opened our County Hospital in this city twenty-five years ago, and were managing it beautifully until the war came, and then it was taken away from them; but they demonstrated their ability to manage a hospital. They have accommodations for entertaining about 200 guests, and I think it is the best place to regain health I have ever known. If the patients should tire of Lookout Mountain House, kept by MR. CARTER, they can go to Marietta in a few hours, and here is a pleasant health resort. I never passed a more pleasant week than at the Whitlock House in Marietta. MR. and MRS. WHITLOCK are the most genial host and hostess I ever met. They look carefully after the interests of their guests and provide them with every comfort.

Now, allow me to epitomize my rambling re-

marks. My reasons for recommending the South as a place to send consumptives are:

1. When the climate in Chicago is unsuited for consumptive patients, the climate is mild and favorable in the South.

2. The nearness of Chattanooga, Marietta and Asheville to Chicago and the North. The trip can be made in a few hours.

3. The results of a limited experience have convinced me that my patients do as well, if not better, at these points than any other.

In conclusion, I wish to add that the reason I prefer Lookout Mountain to the other points is on account of the extent and variety of the scenery, and its proximity to a city, and greater nearness to Chicago.

DR. J. J. M. ANGEAR said: I endorse nearly all that PROF. ROSS has said, and most of the paper. There are a few points in the paper that I think might be amplified and supplemented profitably. The author speaks of home-comforts, pleasing scenery and congenial society, and these three things, I think, demand a good deal of our attention. We are all aware of the fact that there is some truth in the old saying: "Laugh and get fat." It is an impossibility for any one to do well who is constantly under a cloud; it has a depressing influence upon the mind, I care not how good the climate. And here comes one of the greatest difficulties which we have to contend against in all diseases. Let us imagine for a moment the head of a dependent family who fears consumption. The physician advises him to leave home for a more salubrious climate, and under the pressure of circumstances he takes his departure. It may be that he begins to think as soon as he has bought his ticket: there is $25 or $100 that my children will need. This is a big load He thinks he is going to be gone for a month or two, and he estimates what his services would be worth to his family, and if anything should happen to him his widow will need it: and this is another big load. We can readily see that it is impossible for his frail frame to bear up under these burdens. It is probable that there would be more cheerfulness at home than away among strangers, no matter how desirable these places may seem. These things must be taken into consideration. I have thought, for a number of years, that the benefit of our watering-places was not from the water, but because the patient leaves home, leaves business cares and has a gay, good time. He goes to Saratoga with plenty of money in his pocket, enjoys the fine music, enters into the gaieties of the ball and the festivities of the occasion, light as a feather, buoyant as the mountain air. Sadness of heart has melted away, that patient can "laugh and get fat." There is something here for us to study, the tranquility and peace of mind so that nutrition can go on undisturbed.

The idea is advanced in the paper that in good environments bacteria cannot thrive. If they cannot thrive they are not able to do their mischief. There may be something in this which we do not understand. We do not believe that laughter will ever get rid of a tapeworm; we do not believe that cheerful society and good music will cast out or put a check upon the ravages of trichina, but we are compelled by force of circumstances to acknowledge the truthfulness of the assertion that good environments will check, if not destroy, the influence of microbes, and if we are convinced that microbes are really the cause of tuberculosis, then we want to place the patient in such an environment, which will check, if not destroy, their ravages. It may be wise for us to select pure air, the right temperature, and sunshine: but unless the patient can carry contentment with him, sunshine in his soul, it would be better for him to stay at home; and unless he has abundant means so that he may not feel pinched, and can enter into the gaieties of the place, he had better stay at home.

DR. J. G. KIERNAN said: The point raised by DR. ANGEAR, as to the mental condition having an influence on the progress of the disease, is valid as to principle, but he has ignored the mental peculiarities of the consumptive patient. Hope has been known as a characteristic for a long time, but the suspicious element is a less known and as frequent characteristic. In removing a patient who has tuberculosis from the surroundings of his home we are doing the best possible for that patient, from a moral standpoint.

DR. R. G. BOGUE said: Some years ago it was my fortune to spend a few years in the South, the greater portion of them in the mountain regions of Tennessee, Northern Alabama and Northern Georgia; all of one winter, about six months, in Chattanooga. I can bear testimony to the wholesomeness of the entire region for the greater part of the year; and in the mountains regions for all of the year; in the valleys there are about two months in the summer season when malaria is quite prevalent, but up in the mountains it is eminently a healthy country. The air is pure, the water is good, the scenery is magnificent; there is everything to entertain and amuse one so far as scenery is concerned. The region of Chattanooga is peculiar and delightful from the variety of the mountain- and valley-scenery. The entire year or very nearly so, it is practicable for people to be out of doors. During the latter part of December, all of January and the early part of February, the temperature is subject to considerable variation: it is reasonably cold and there are some storms, but after the middle of February, with the exception of now and then a short storm, the climate is delightful, extending thus through the whole summer. The a

titude in the mountain region is such as to render the summer not oppressive. I fancy that for the colder and stormy portion of the winter the region south of Atlanta might be better for consumptive patients than north of Atlanta, although personally I do not know, as I was not so far south. There is Macon, and that part of Georgia fifty miles north of the coast, and extending through Georgia and Atlanta to the region of Mobile. Quite early in the spring one can come northward, coming north of that range of mountains into the valley this side of the Atlanta, to Marietta, and find a delightful spring climate, with a great deal of sunshine, and a forest filled with bloom for two months in the spring, and everything, as far as climate and scenery are concerned, to delight even a sick person. There is much to recommend the region of Chattanooga to invalids, and if they are not satisfied with Chattanooga or the vicinity, there are other points, Marietta, Atlanta, and north of the Tennessee river, the region of Huntsville, and north from that as far as Nashville, so that consumptive patients or invalids may be in a mild, invigorating temperature, really all the year in the space of a couple of hundred miles.

(CONTINUED FROM PAGE 132)

COCAINE DOSAGE AND COCAINE ADDICTION.*

BY J. B. MATTISON, M. D., BROOKLYN, N. Y.

DR. SCHILLING, in the *Pharmaceutical Journal*, records a case in which the injection of six drops of a two-per-cent. solution into the gums of a woman, aged twenty-six, to prevent pain of extracting a molar, was followed by toxic symptoms, of which facial rigidity, deafness, blindness, complete loss of motion and sensation, and unconsciousness for a half-hour were the chief. They subsided after inhaling nitrite of amyl.

DR. HEYMAN reports a case in which the effects following the use of cocaine closely resemble that noted by MYERHAUSEN. The patient, a boy, had a solution of cocaine liberally applied to his pharynx and larynx. Toxic symptoms soon set in. He was apathetic, with speech and walking disturbed. Pulse and respiration increased. Temperature rose to 100¾. Five hours after, patient could not walk. Symptoms persisted ten hours.

DR. SCHWARZBACH, Australasian *Medical Gazette*, January, 1886, reports the case of a lady who used cocaine, locally, for pain in the eye. She suddenly became very ill; stupor, pallor, slow pulse and cold perspiration. Under wine and strong coffee, recovered in a few hours.

*Read before the Kings County Med. Soc. Feb 15, 1887.

G. BOCKL observed alarming effects follow an injection of six drops of a two per-cent. solution into the gums. In ten minutes patient became unconscious, with gaze fixed, vision defective and delirium. Nitrite of amyl gave relief.

DR. LANDESBURG, New York City, used two grains subcutaneously, as an experiment, on himself. In less than two minutes he felt his heart beating violently and blood rushing to his head, quickly followed by fullness and roaring in the latter, and noises in the ears. Thought was confused, volition impaired. Great restlessness, and numbness with twitchings were felt in toes and fingers. Nausea and epigastric pressure marked. Face very pale and covered with cold sweat. Pulse feeble, eyes sunken, pupils dilated, vision dim. In thirty minutes, took to bed with nausea, headache and general prostration. Recovery followed a night's sound sleep.

DRS. BARDET and MEYER, assistants of DUJARDIN-BEAUMETZ, anæsthetizing, for experiment, their own skin, observed, half an hour after the injections, dilated pupils and comatose symptoms. One of them fell in a state of vertigo, with pallid face and extreme heart weakness. These toxic symptoms followed hypodermic doses, never exceeding one-third of a grain.

DR. ZIEM, of Dantzic, in 1885, reported a case in which a solution applied to the eye caused pallor and embarrassed breathing, and said that, up to that time, seventeen cases had been cited in ophthalmological literature, in which toxic effects followed the use of cocaine. In three, by injection: fourteen applied to the eye. Pallor, giddiness, dyspnea, malaise, apathy, great prostration, tottering gait, difficulty of speech, mental confusion and extraordinary restlessness were symptoms noted in both strong and feeble men an women.

DR. G. W. KENNICOTT, in the Chicago Medical Journal, October 20, 1885, reports: A young woman, aged twenty-five, of good constitution, had been using per medical advice, a two-per-cent. solution of cocaine for hay-fever. The supply becoming exhausted, she procured two 5 grain vials of the muriate, full strength, and applied two-thirds of the contents of one bottle to both nostrils with a small glass insufflator. In twenty minutes she became dizzy, vision dark, and a sinking sensation occurred, with great weakness. In half an hour she was semi-comatose, pulse scarcely countable, so rapid and weak: pupils widely dilated: speech and swallowing difficult: dyspneal nausea: throat dry: teeth chattered, and she shivered with cold. Later, drowsy, eyes closed: face muscles affected: weakness extreme, she could not support her head. She recovered in three hours under brandy, ammonia, digitalis, heat to epigastrium, and heat and friction to extremities.

Dr. Geo. J. Engelman, in the Medical Review, June 13, 1885, records these cases: Mrs. C., aged twenty-eight, in fair health, at 5 P. M. took one-sixth of a grain by the month; one hour later this dose was repeated, and soon after she felt a tingling in her fingers, hands and wrists, with discomfort and oppression about the chest, and vomiting the moment she turned in bed. At 7.30 she took a third dose, same amount, and in fifteen minutes was excessively restless, great difficulty of breathing, tight band-like feeling about chest, faint, and felt as if dying. At 8 o'clock still faint, was dyspneaic, and tingling had extended to feet and legs. At 8.15, tingling gave way to numbess, beginning in hands and extending to feet; "became perfectly still, as if breathing her last;" quite numb and stiff; thumbs adducted; pulse feeble, frequent, irregular and intermittent. These toxic symptoms subsides after one-sixth of a grain of morphia, hypodermically.

Mrs. F., aged thirty-five, enciente, took forty drops of a four-per-cent. solution to relieve nausea. Immediately she felt a complete numbness along the tongue and throat; to test the feeling, she bit her tongue, and found it perfectly numb. She became weak, perfectly relaxed, with oppression about the heart, and felt as if dying. In twenty minutes the entire body became cold and numb. Pulse feeble and very rapid. Heart felt as if constricted by an iron band and "hammered loudly at a fearful rate." Symptoms persisted several hours.

Dr. Litten, at a meeting of the Berlin Medical Society, November 4, 1885, in a debate on the action of this drug, cautions against its too general use. He said that among other ill-effects known to occur after an injection are attacks of mania, sometimes very violent, which may prove dangerous; and he asserted the various toxic effects, in some individuals, reach such a high degree that actual danger to life seems to threaten the patient. The three cases next cited are of interest in this regard.

Dr. Geo. T. Stevens, Medical Record, January 17, 1885, reports that he injected four minims of 3½-per-cent. solution under the conjunctiva of a strong man. In eighteen minutes "violent convulsions set in, attended with desperate struggles to breathe. The face became livid, consciousness was lost, and the patient became uncontrollable. After struggling in an easy-chair for some time, he arose in a state of frenzy and struck violently about. Stimulants were administered, and the most alarming stage of the paroxysm ceased after a duration of nearly twenty minutes. Fully half an hour, however, passed before we could regard our patient as beyond danger. I believe that this paroxysm was the manifestation of the toxic influence of the drug."

Dr. Robert Newman, of New York, has reported to me a case of a gentleman, aged forty, into whose urethra a physician injected one drachm of a cocaine solution—strength not stated—prior to cutting the meatus. In half a minute patient's face flushed he felt a general pricking sensation, followed by a piercing sting in his temple, violent headache and great excitement. Then he became maniacal, and under the delusion that he had been attacked by a robber, sprang from his seat, seized the doctor by the throat and began to beat him. The delirious excitement persisted three hours.

A well-known physician of this city gave me his experience with cocaine. Suffering from an attack of otitis media, he use freely, by advice from his medical attendant, a 10-per-cent. solution in the ear. It caused flushed face, quickened pulse, and breathing—the former, 130—wild look, fixed gaze, hallucinations and delusions—the latter homicidal—attempting assault on a near relative—which persisted three hours, followed by decided depression.

Dr. J. P. Knoche, in the Kansas City Medical Record, December, 1886, reports the case of a man, aged twenty-three, to whom he gave cocaine, hypodermically, for anæsthesia, using, in several injections, within thirty-five minutes, about two and two-fifth grains. In seven minutes patient was cold, and sensation lost in hands, forearms, chest and legs. In twenty minutes breathing was difficult, interrupted, sighing. Pulse almost imperceptible, intermittent and very rapid; lips and skin generally pale and cold. Patient was semi-comatose for a time. Numbness in extremities lasted four hours; imperfect palmar sensation ten hours. Nine hours after, severe renal pain and copious diuresis; the tremor and weakness continued twenty-four hours. Symptoms gradually decreased under free alcoholic stimulation.

Dr. H. J. Boldt, New York city, reports four cases of toxic symptoms from cocaine injections. He injected fifteen drops of a four-per-cent. solution to relieve an attack of supra-orbital neuralgia. Immediately patient's face became red, dizziness, dyspnea, pulse frequent and feeble, and feeling of oppresion about the heart. In three minutes patient fell unconscious and breathing ceased, so that, for fifteen minutes, artificial respiration was required. Then respiration returned, but only five or six per minute, deep and sighing. Heart-sounds and pulse very weak and frequent: pupils widely dilated: gaze fixed. Shortly before and directly after return of consciousness, convulsive twitchings of upper extremities. Ten minutes later, speech was confused and incoherent. In an hour patient was able to walk, but gait was groggy. Neuralgic pain did not return for three days. At patient's request, ten drops of the same solution were again injected and like symptoms resulted, but were not so prolonged. Five or six drops of this solution, in this patient,

caused flushing, dizziness and dyspnea, with constricted feeling about chest continuing half an hour.

II. Female, aged thirty-three. Eight drops of a four-per-cent. solution were injected for local anæsthesia prior to operation for lacerated cervix. It caused flushing, followed by dizziness, dyspnea, nausea, deathly pallor and cold sweat. Pulse frequent and feeble; pupils dilated. symptoms subsided in half an hour, leaving patient so weak that operation was deferred.

III. Female, aged thirty-three. Neuralgic headache. Eight drops of four per-cent. solution were injected over greatest pain causing dizziness, dyspnea, quick, weak pulse, distress in chest, especially about heart, deathly pallor, nausea and sweating, persisting more or less for forty-five minutes.

IV. Female, aged twenty-six. Five drops of a five-per-cent. solution, caused, three minutes after injection, giddiness, palpitation, quick pulse, languor, and temperature rise to 100 8-10 in fifteen minutes.

Dr. F. De Havilland Hall, London, reported the case of a lady, aged fifty-six, to whose nostrils he applied a ten-per-cent. solution, by spraying. In a few minutes patient complained of cramp-feeling in throat; became very excited; face ashy hue; hands cold; pulse very frequent, and distress was so great that chloroform was given, which relieved the spasm, but she was not able to leave till after four hours.

Knapp noted headache, vertigo, nausea, tottering gait, skin pallor and cold sweat from hypodermic injection of thirty-five drops of a four-per-cent solution, with instillation of a few drops of the same in the conjunctival sac.

Reich reported two cases, both females, aged ten and sixty, in which toxic symptoms followed the use of fifteen drops of a two-per-cent. solution.

Bellyarminoff, of St. Petersburg, observed five cases in which a four-per-cent. solution to the eye, caused headache, vertigo, nausea and vomiting.

Alex. Thompson, M. B., Huntly, Eng., reported this case: He applied a few drops of a fresh two-per-cent. solution to the conjunctiva of W. R., aged twenty-five, perfectly healthy, prior to removing a fragment of steel. In two minutes, patient became deadly pale, reeled, and would have fallen if not supported; was quite pulseless, and with difficulty was brought round. Fully half an hour passed before he could go home, and even then was giddy.

Dr. Grosholz, Towyn, Eng., observed a healthy farmer to whose eye three drops of a four-per-cent. solution were applied, causing pallor, profuse sweating about head and neck, irregular pulse, embarrassed respiration and impending syncope. A stimulant was given, but it was several minutes before the pulse became regular and consciousness was regained.

Dr. Edward Bradley, New York City, noted this case: A professional gentleman, in perfect health, had a four-per-cent. solution freely used in the filling of a carious tooth. Toxic symptoms soon appeared, the most noted being facial paralysis on the right side. "This condition undoubtedly began its development much earlier than the time of its discovery, as it went on its course of extension for the two succeeding days, involving every function on the right side of the head, rendering me deaf, and unable to close the eye. The brain was depressed so as to destroy all continuity of thought, and I was unable to read or exercise any mental function whatever." The paralysis remained stationary ten days, then slowly lessened, but had not entirely gone at end of six weeks.

Smidt, Ranc, Obersteiner and Blumenthal have noted, after an injection of cocaine, dizziness, agrypnia, muscular twitchings, increased reflex excitability, hallucinations and mania.

Dr. Chas. H. Hughes, St. Louis, editor of Alienist and Neurologist, wrote me: "I know of a case where one grain of cocaine paralyzed the heart so effectually that the pulse became imperceptible for a few seconds, and only my presence with my battery, which was in the room, and ammonia, and a morphia and strychnia hypodermic saved the patient."

Germane to the subject of acute cocaine toxæmia is that of cocaine addiction—these notes are preliminary to a more extensive paper on cocaine inebriety—the existence of which Dr. Hammond denies. He took a half dozen doses, at intervals of one to four days, and says "he acquired no habit." But to argue from that, no danger of addiction, is absurd. Such evidence is worthless. Dr. Hammond might do the same thing with morphia—more, he might take morphia, subcutaneously, daily, for a month or two, without creating a "habit"—albeit its esnaring power is well admitted—and yet that would not prove its freedom from danger. Not at all; it would merely show his exceptional strength to resist—many, under a like pressure, would surely succumb.

Supporting this opinion, I quote from the last report of Dr. Orpheus Everts, Cincinnati Sanitarium—a gentleman well known in alienistic circles—which report was kindly sent me after my paper was written, who says: "A distinguished physician of New York has recently reported personal experiences tending to discredit the claim that a cocaine habit, corresponding to the morphine habit is acquirable. The judgment of this distinguished physician is based upon the evidence of personal experience, reported by himself, he hav-

ing failed to acquire the habit, or any especial fondness for the specific effects of the drug, experienced by the hypodermic injection of one, two, three, and finally eighteen grains of the salt, on five or six different occasions in the evening before going to bed.

"But for the great reputation of this physician as an author and observer of facts, this denial would have but little weight. The testimony is both bad and insufficient. Bad, because reported by himself—the testimony of an intoxicated person respecting his experiences while intoxicated being proverbially untrustworthy—and insufficient, because the experiment was not continued long enough. Many instances might be cited of total failure to establish the morphine habit or habitual drunkenness, by the use of six or seven doses of morphine, or six or seven drinks of whisky, one a day for six or seven days in succession. It is often the case that such experiences end with disgust for the drugs used, instead of a desire to continue their use. There is also much and accumulating testimony, by competent observers, to the fact of such a habit as is alleged, respecting cocaine, which a single opinion will not invalidate, however worthy of consideration."

Cocainism is not the outcome of using the drug at long intervals. Its transient effect and the demand of an impaired nerve status compel frequent taking—more than alcohol or opium—so that habituès have been known to take it ten, twenty or more times daily, and it is this—growing by what it feeds on—that tends to create and continue the disease.

In the early days of chloral, one point claimed in its favor was a fredom from a risk of "habit," a claim long ago exploded, as cases of chloralism well prove, and yet, I venture to assert, there are more cases of cocaine-taking in this country to-day, less than three years since its arrival, than of chloral after a period more than six times as long.

Dr. Hammond says there may be instances of cocainism as rare as chronic tea-taking, and of cases with or after habitual alcohol or opium using, but, as for quitting the drug, he believes every cocaine-taker could if he would.

The same opinion regarding opium obtains among some medical men, and the only effective argument against such a fallacy is to place those who hold it under power of that drug, and then have them prove their precept by their practice.

While admitting that most instances of cocaine-taking are, for obvious reasons, in those who have been, or are, alcohol or opium habituès, especially the latter, I maintain there are cases of pure, primary addiction, and that the number is increasing, at home and abroad. Foreign writers have noted them, and they will figure in our records. Notes of one such are here given; others are at command.

I am indebted to the courtesy of Dr. J. E. Clark, Professor of Chemistry, Detroit College of Medicine, as follows: "In July, 1885, a young man applied to me for relief for what he called a "severe and persistent case of hay-fever." He had consulted a large number of physicians without obtaining relief from the irritating and annoying acrid discharge from the nostrils. He claimed he only wished relief for a time until he could make arrangements to leave for the west, as he had lost hope for anything like a permanent cure in this climate. I prescribed the following:

℞ Cocaini muriatis, 8 grains,
Aquæ camphoræ, 6 drops,
Aquæ destill., 1 ounce,

with directions to pour a small quantity in the hand, and snuff occasionally.

Three or four days later he appeared at my office, his face radiant with hope that he had found a specific, and remarked that he had felt better the last few days than for a year. He had exhausted his medicine, and I consented to his having the prescription refilled. I heard no more of the case, until one day in November when I was in a drug store, and was asked by the proprietor "do you know Mr. —— is using about eight dollars worth of cocaine a week?" I expressed my astonishment, forbade any further sale, and at once called, but failed to find the young man. I then drove to his parents' residence and asked them if they were aware of their son's excess in this matter. They did not know of his addiction to the cocaine, but had noticed for some time, peculiar symptoms which alarmed them. I explained the circumstances fully and added my belief that no serious results would ensue provided total abstinence should follow. The sequel shows, however, the 'habit' had gone too far to be easily eradicated, as the young man went on until he became temporarily insane, had to retire from his business, and be under strict supervision until the craving disappeared, a space of about three months. The docter adds—"This case has furnished me such *positive proof* of a lurking danger in the use of cocaine, that all the negative evidence or hypothetical assumptions published or adduced cannot have the least impression in causing me to relax for an instant, the most rigid supervision of every patient to whom I in any manner administer or apply the drug."

The following report, kindly sent me by Dr. Douglas Schoolfield, Newport, Ky., well shows the ill effects of cocaine on patients addicted to morphine.

Mr. —— had been an opium habituè for several years, from morphine given subcutaneously to relieve sciatica.

In May, 1885, taking ten to fifteen grains daily, with nervous and digestive systems impaired, but weight nearly normal and mind clear and vigorous, he came under the doctor's care. Cocaine being then in rising repute as a cure for morphine-taking, he was given half a grain, subcutaneously, knowing, unfortunately, what it was. Nausea, pallor, rigors and cold sweat soon ensued, followed by flushed face, brightened eyes and a feeling "never so good in all his life." He was delighted, talked incessantly and declared himself, mentally, the peer of SPURGEON; physically, equal to SAMSON. The stimulant effect continued two hours, followed by lassitude and sleep. The cocaine was given at irregular, increasing intervals for two weeks, when an effort was made to quit. Two days later, he left for a summer resort and was lost sight of. The next heard of him was through the town druggist, who remarked that he thought Mr—must be "getting a 'corner' on cocaine," as he had ordered his entire supply and the address of his wholesale house. He was written to and urged to place himself under proper medical care, but no more was heard of him for two months, when the Doctor was sent for, told he had been brought back and given this history. On starting for his summer trip he procured a supply of cocaine and began taking it himself, several times a day. In a few days he talked and acted strangely, slept little, appetite failed and he grew worse daily. An effort was made to withhold it, or substitute morphia, but he resisted both and raved like a madman. He had always been kind and even-tempered, but now became irritable and abusive; had hallucinations and homicidal delusions; would leap from bed, rush to window, raise sash and gesticulate wildly at a fancied foe. Calmed, he would be quiet a time, and then break out in the loudest abuse of some friend present, declaring him in league with the devil for his harm.

The Doctor was warned as to entering his room, and proceeding with care, patient was found in fighting form, with a long necked bottle ready for battle. Addressed kindly, his suspicions were disarmed, he abandoned his hostile attitude, apologized and declared himself quite mistaken. "His condition was pitiful indeed. Constant vigil and loss of sleep had made him a wreck. He was pale, thin, and haggard; ate nothing and slept none; was a prey to distorted fancy, a victim of unrest."

Under proper treatment he was partially recovered, and was placed in Sanitarium care. Six weeks after he was discharged, but in bad mental condition, morose and melancholic. He soon became violent and threatening, and was again taken to an asylum, where he now is, improved and improving.

My experience with a number of cocaine cases, makes to me two things certain—there is a pernicious power *per se* in this drug, and it finds in the opium habituè a peculiar condition that specially favors its ill effects, making it, for such patients, as has well been said, the "Devil's own device" to still further enslave.

And this opinion is that of others, for it is the testimony, without exception, so far as I know, of those who have had to do with this disease, that as an intoxicant cocaine, is more dangerous than alcohol or opium, and that inebriety resulting from its use is more marked and unyielding than in any other form.

DR. SHRADY—Editorial, *Medical Record*, November 28th, 1885—says: "To some persons nothing is more fascinating than indulgence in cocaine. It relieves the sense of exhaustion, dispels mental depression and produces a delicious sense of exhilaration and well-being. The after-effects are, at first sight, almost imperceptible, but continual indulgence finally creates a craving which must be satisfied; the individual then becomes nervous, tremulous, sleepless, without appetite, and he is at last reduced to a condition of pitiable neurasthenia."

DR. ALEX. B. SHAW, Physician to St. Vincent Asylum for the Insane, St. Louis, asserts: "Once a man flies to cocaine for relief from 'cares that annoy,' he generally continues with such rapid strides towards such complete subjugation to its bewitching thraldom as but few will ever be rescued from by any power of will which they may be able to bring to their aid."

DR. EVERTS writes: "It is not only not an antidote to opium-poisoning—or, more properly speaking, the organic demand for such drug-effects as have been acquired by use—but is itself a fascinating and dangerous intoxicant, the effects of which may be more difficult to counteract and renounce than are those of opium or its derivatives."

DR. HUGHES declares it "a remedy to be used with extreme caution and prudence internally, and the large doses reported as having been given are not ordinarily safe. It will bear watching. It crazes and kills quicker than opium. The possibilities for immediate harm are not only great, but the likelihood of remote damage when tolerance is established is not small. The cocaine habit, more pernicious than the morphine neurosis, is the certain entailment of its frequent administration and its thraldom is far more tyrannical than the slavery of opium."

ERLENMEYER calls cocaine the third scourge of humanity—alcohol and opium being the first and second—and ERLENMEYER is right, as to toxic neuroses. He says: "Its characteristic effects are vaso-motor paralysis, accelerated pulse, profuse sweats, dyspnea and syncope, failure of general nutrition, eyes sunken, skin cadaveric, with mental trouble that sometimes

needs restraint," and I am positive, from cases under my care, that he is correct.

I think it, for many, notably the large and enlarging number of opium and alcohol habitués, the most fascinating and seductive, dangerous and destructive drug extant; and while admitting its great value in various disordered conditions, earnestly warn all against its careless giving in these cases, and especially insist on the great danger of self-injecting, a course almost certain to entail added ill.

To the man who has gone down under opium and who thinks of taking to cocaine in hope of being lifted out of the mire, I would say, "don't," lest he sink the deeper.

I have yet to learn of a single instance in which such an effort reached success; but know many cases where failure followed, or, worse, cocaine- or coca-morphia-addiction.

And the need of caution against free and frequent using obtains in other cases, for there may come a demand for continued taking that will not be denied.

To summarize:

Cocaine may be toxic, sometimes deadly, in large doses.

It may give rise to dangerous, or even fatal symptoms, in doses usually deemed safe.

The danger, near and remote, is greatest when given under the skin.

It may produce a diseased condition—in which the will is prostrate and the patient powerless—a true toxic neurosis, more marked and less hopeful than that from alcohol or opium.

Such being my belief, I regard DR. HAMMOND'S statements mistaken, and his conclusions rash and dangerous.

Correspondence.

CONSUMPTION IN DAKOTA.

In his address before the British Medical Association last summer, JOHN S. BILLINGS presented a chart showing the frequency of phthisis in different portions of the United States. The portion of the Northwest including the Red River country, was marked as to indicate a high rate of mortality from tuberculous diseases. Owing to the recent settlement and the inaccurate reports, the celebrated scientist must have resorted to a partial estimate, without knowing the exact figures. There are at present a great number of causes to produce a high rate of mortality from tuberculous diseases. The climate is unfavorable in the greater part of the year, to produce any beneficial effect on the disease. The cold is often arctic, and the thermometer has often registered as low as 58 degrees below at St. Vincent U. S. Signal Station. The frequent blizzards with their all-penetrating winds, blinding snow, and often at a low temperature, are the causes of a great number of cases of bronchitis. Bad, and often poorly-prepared food, scanty clothing, hastily constructed houses and above all, hereditary proclivities to the disease amongst the Norwegian population. The disease would undoubtedly make greater ravages was not the summer very favorable to the recovery of a certain number of cases. In June, July and August, the temperature is stationary, and seldom as high as 100 degrees above. The air is remarkably pure, dry and clear; atmospheric changes are infrequent, the nights are always cold, and a refreshing night's sleep is never interrupted or impossible from any climatic causes. There are a number of celebrated physicians in the East who recommend the climate of North Dakota, and they often advise their patients to take a "trip out West." In a few cases, where the patients possess a fairly robust constitution, with all organs performing their functions so as to be taxed without injury with increased labor incicident to a higher altitude, and who have means at their command to procure the best of the necessities of life, a summer residence would be beneficial. The region around Devil's Lake, with its large body of salt water and grand mountain scenery, recommends itself aside from having very good hotel accommodations, a convenience not often met with on the borders of civilization. To send a patient up here, suffering in the second stages of the disease, and who may be compelled to submit himself to the rigors of this Northern climate, is simply to hasten him to the inevitable. It must not be forgotten that any remedial agent that will benefit certain well-selected cases, will in others prove to be capable of producing dire results.

The aborigines suffer from phthisis to a frightful extent. DR. M. J. DRABELL, surgeon at Fort Totten Indian Agency, writes me as follows: "Tuberculosis is a disease which is most prevalent among our Indians, and I have at present about fifty cases on my record; scarcely a week passes without a death from that disease. Amongst the Norwegians, phthisis is very prevalent, being for the most part hereditary. For nearly one thousand years the peasants of Norway have lived in narrow valleys inclosed by high and often impassable mountains. The social 'law' compells a man to marry in the settlement, and often one of his kin. The result has been what might be expected. Many of the robust and well-developed specimens of the Norwegian race carry embodied in their splendid physical forms a taint or a proclivity to phthisis, and sometimes leprosy. The royal sanitary reports of the Norwegian government, show that the death-rate is as high as 40 per cent. of the adult

population in certain localities, while in the cities, it is very low. The immigration to this country had on some a very beneficial result, while the change of food, habits, climate and social surroundings had on others the opposite effect. The tendency speedily developed, and thirty-five to forty per cent. of the death-rate of the adult population up here is from phthisis. I believe there are a larger number who suffer from the fibroid form of phthisis up here, in proportion, than the tuberculous variety further south. Cases of fibroid phthisis are not rare, and by judicious treatment, the disease is often arrested in its course for a long time. The treatment of the tuberculosis variety during the greater part of the year, give, as might be expected, unfavorable results. After a number of years, I am justified in my belief that a better report can be made. The people will learn to protect themselves by better constructed houses, warmer clothing and consequently less unnecessary exposure to the extreme cold. The intermarriages of the Norwegians will be lessened, new blood will give vigor to the race, and the hereditary taint will be reduced to the minimum. Then we may be able to give a more satisfactory report.

J. E. ENGSTADT, M. D.

GRAND FORKS, DAK.

CASE OF CEREBRO-SPINAL MENINGITIS—DEATH.

MR. C. came to my office March 11th to get medicine for his daughter, aged seven years, who, he informed me, was suffering from indigestion, torpid bowels, and headache. I had a year before seen the little girl, with another physician; we found her then suffering from mitral regurgitation, the effects of an endocarditis contracted during rheumatic fever, three years previous. I prescribed a mild mercurial at bed-time, one of the mineral acids, and lactopeptine after meals, with some quinine in capsules for the headache (which the father described as periodic), should it not be relieved as the digestive troubles improved. Heard nothing further from the case until March 17th, when the father reported the appetite, etc., had been much improved, but the headache was still present, in spite of the exhibition of the quinine; that there was now vomiting and great prostration, and requested me to call. Upon reaching the house, I found patient in bed, the vomiting somewhat abated, tongue coated a moist brown, pulse 130, temperature 101, bowels constipated, pain complained of nowhere but in the frontal region, her lungs were sound. She had, up to March 11th, been in her usual health, which was always indifferent since her rheumatic attack, the child being dull, with poor appetite, easily excited and fatigued. Her surroundings were excellent, and she had been carefully looked after. I left her a mixture of bismuth sub-nit. and hydrocyanic acid dil. to control the vomiting, and calomel and magnesia for the constipation. She appeared rather deaf, but this I attributed to the quinine she had lately taken.

March 18th, the child being no better, though the vomiting had ceased, DR. J. F. SPINNER was called in consultation. We met about 6.30 P. M. The child was now quite deaf, pulse 135, temperature 102°, tongue slightly coated, pupils normal, frontal headache still present; child restless and continually calling for water; enemas brought away hard fecal matter. We could arrive at no definite diagnosis, but agreed to await development of symptoms; patient passed a moderately good night.

March 20th, patient dull and listless, temperature 102⅘°, pulse 135, still deaf, pupils slightly dilated and responds feebly to light, bowels regular. Suspecting grave brain trouble, we ordered ice to head, bromide of potass., liquid nourishment at stated intervals, as child remained indifferent, but swallowed anything offered.

March 21st, DR. J. F. SPINNER saw case in morning, and found symptoms about the same as at my last visit. The mother telling him the child had complained of severe pain at back of neck over cervical region, he ordered a turpentine and white of egg embrocation to be applied. No tenderness was discovered on pressure. Saw case myself same evening; temperature 103°, pulse 145, pupils dilated, decided retraction of the head, the least bending forward, causing a cry of anguish; features flushed, head hot. The mother stated she had seen dark spots about back the evening before, but examination failed to reveal them. I diagnosed the case as cerebro-spinal meningitis, used counter-irritation by means of mustard over cervical vertebræ, added ergot to the bromide, continued the ice to head at intervals. The child passed a bad night, but managed to take some nourishment.

March 22d, we saw the case again in consultation, the doctor agreeing with the diagnosis. The temperature was now 104°, pulse 140, respiration 40, pupils widely dilated, head strongly retracted, child in a semi-comatose condition, rectum and bladder acting involuntarily. During early part of morning there had been two slight convulsive attacks. A blister was applied over cervical vertebræ, chloral hydrate added to the remedies already in use; otherwise the treatment was continued. I should add, however, that mustard baths to feet had been continually tried.

Not to weary my readers, I will sum up as briefly as possible: From this time to the morning of the 24th, at 4.30, at which time our patient died, she never rallied, but remained in a profound stupor, her pulse varying from 130 to

160. The temperature gradually rose until two hours before death, it reached 107⅘°; during the last twelve hours a copious perspiration occurred. I would say, in conclusion, that there was uncertainity for a considerable time as to the diagnosis, but when the symptoms did develop they were recognized, and could be attributed to nothing but the disease stated.

ROBERT O'HARA, M. D.
CHARLEMONT, VA.

PHYTOLACCA DECANDRA IN GOITRE.

I desire to testify to the (as I believe) correct deductions of DR. ELY, as published in your issue of March 10th, regarding the use of phytolacca decandra. Several years ago I saw it recommended, but not noting any confirmation I did not use it till about two years ago, for any special cases of the kind the doctor has called attention to. I first used it in a case of exophthalmic goitre of twelve years' standing, in which both thyroid glands were enlarged and constantly becoming larger. It was applied in full strength of the tincture. I prescribed various internal remedies as alteratives and heart tonics, etc., for some time, but finally settled upon a simple stomachic tonic containing small doses of cactus grandifolia, and one-minim doses of tincture of aconite, three times a day, as recommended in FLINT'S Clinical Medicine, page 236, and had the satisfaction after about nine months of nearly continuous treatment, of seeing the patient (a widow lady of about 40) restored to a very good degree of health. She then passed from my observation by removing to Dakota, after being married, perhaps owing to her improved appearance, as the bronchocele had entirely disappeared. She continued the treatment a while longer, but since reported herself entirely well.

In every case of goitre that has since presented itself, I have first and last used the poke-root.

I have a record of eight cases, all of which I have successfully treated, with one exception, with that remedy alone. Five were young females, from twelve to twenty-two; two were males about twenty. These cases were of more recent date, having been affected from three months to as many years. I have prescribed the remedy in 1- to 5-drop doses, one to three times a day, in conjunction with its external application, in all but three cases, which have been cured by its application to the glands alone.

The exception is a case of 22 years' standing; under treatment four months. The first two weeks' treatment caused a decrease in size of one-half inch, but since that time it has only decreased as much, or another half inch, and seems likely to prove beyond the influence of the medicine to entirely remove it. It has, however, materially lessened the sensation of constriction of the throat formerly present in this case. I am having patient still continue treatment as it does not seem to cause any unpleasant symptoms, nor has it in any case.

I have tried it with good results also in enlargement of other glands, particularly in the case of the cervical glands as an accompaniment or sequela of scarlet fever, in orchitis and in threatened "broken breasts"; in each case both externally and internally.

I would just call the attention of some of your readers to the fact that "scoke root" (the name that the remedy in question bears in some localities) has long been considered a specific by dairy men and veterinarians for "caked udder" of cows. I think very few disappointments are in store for those who use this remedy carefully in cases of simple glandular enlargement without cystic complication. I have added my testimeny simply to encourage its trial by others, as I find many of us get skeptical regarding new remedies, or new applications of old ones, unless pretty well convinced by our own or others' experience of their utility, because of the many disappointments we have met with heretofore. I would emphasize DR. ELY'S caution about a reliable preparation of the plant.

J. V. STEVENS, M. D.
PRAIRIE DU LAC, WIS.

SYRUP TRIFOLIUM CO. IN SYPHILIS.

Mr. S. age 25, unmarried, came to me on the evening of the 5th of March, 1886. The history he gave to me of himself was about as follows:

During the winter of '83 and '84, while working at his trade, that of a carpenter, in Richmond, Indiana, he contracted syphilis. He remained at work a few weeks after this, when becoming fully satisfied as to the nature of his trouble he came home to this place and commenced treatment with a physician whose chief reliance must have been (considering the young man's condition when I saw him) some of the various forms of mercury. He remained under this treatment about a year, when he finally became discouraged and gave up all treatment.

Some of his friends, after a time, prevailed on him to again commence upon a course of medicine. Accordingly he came to me on the date above mentioned. His condition at this time, was pitiful; his mouth was almost a mass of ulcers, he had a large and deep frontal nodule and more or less superficial ulcers of the scalp. Besides this, he was almost unable to walk and suffered terribly from rheumatism; the latter however, was I think more of a mercurial than syphilitic origin.

I undertook the case and put him upon a treatment consisting of syr. stillingia com. and

iodide pot. in the usual doses, together with various local applications to the nodes and ulcers. With this treatment continued for two months, he improved slowly, but not as fast as I desired; so, about the first of May I put him upon the syr. trifolium compound, as the alterative. He improved so much after using the first bottle that I procured more and kept him upon this mainly through the summer and fall, and was well satisfied with his improvement. He commenced working at his trade in June, and continued to work during the summer and fall. At present he is in good condition to labor and is only idle at times through lack of employment. While not, as yet, absolutely cured, his improvement has been so marked that I am very hopeful of his complete recovery, providing I can control his tendency to dissipation, which has, more or less retarded his case from the commencement, and which has made it a peculiarly hard one to treat. I have at times had to make some temporary changes in his treatment, but I attribute his improvement almost entirely to the use of the syr. trifolium compound, and from my experience with it in this case I believe it to be a meritorious remedy in syphilis and kindred diseases.

S. G. ROGERS, M. D.,

DALTON, IND.

PHYSICIANS' FEES.

I have read with much interest the articles in THE AGE upon this subject. The subject should not be allowed to drop, but should be discussed and agitated until general and permanent results are obtained.

In some states it is impossible for a physician at present to collect a bill from a majority of the people unless they are disposed to pay. If a man holds no property in his own name, and is earning $15 a week, under the system of weekly payments, nothing can be collected, for the law allows him $10 a week, not subject to process, and the lawyer will take the other $5 at least, leaving the physician nothing if he resorts to the trustee process, which, by the way, is recommended to be abolished altogether by some philanthropists—the general result offering great inducements to dishonesty.

Generally speaking, a man earning fifteen or twenty dollars a week ought to pay all ordinary bills. Physicians must organize and secure combined action for self-protection. There is no reason, in religion or humanity, why the burden of lugging all the poor, and the far more numerous "dead beats," should be saddled upon one class of people—the physicians. And it is our own fault if we tamely submit to it. It is as much the duty of a state, city or town to provide its poor with proper medical attendance, and pay for it, as it is to provide them with food, shelter or clothing. To this end money should be raised by taxation and the burden thus uniformly distributed among the people to bear it.

Laws should be enacted which would enable physicians to collect their bills from those who are able to pay, but would rather not, at least not until every other bill under heaven has been disposed of and vacations, theatres, etc., have all been provided for.

The profession should be aroused through the press, and the subject should be brought up at our meetings and united action taken to procure the enactment of such laws as will secure to pysicians their just rights in common with other people.

Meanwhile, let us be justly kind to the honest poor, and send our bills as often as monthly to all. Until better times, every physician should keep a list of his "black sheep," which should be occasionally incorporated in a general town- or county-list, by common agreement, for the benefit of the profession. There is a numerous class of people who will find means to pay their doctor's bill as readily as any other when once they are given to understand that they must, or go without his services.

E. A. SANBORN, M. D.

SOMERVILLE, MASS.

WHERE IS THE PUREST BLOOD?

Within itself this is a question of no vital importance, but we know that sometimes great things depend upon the aggregation of a number of minor points; hence I would like to know the views of some of the professional brethren on the subject. I remember, when I graduated, having to answer one professor: "In the pulmonary vein;" another, "In the renal vein."

My store of medical knowledge is meagre, compared with that of the two professors who disagreed, but it seems plain to me that the purest blood may be found in the renal vein. I give my reasons, and would like to have them criticised if need be:

We know that the blood in passing through the lungs takes on oxygen and gives up carbonic acid gas. This being the only change of importance, we find still retained in the blood of the pulmonary vein the waste product of the nervous system and the nitrogenized tissues of the body—cholesterine and urea. We know that all arteries, except the pulmonary, carry blood free from carbonic acid; we also know that the blood, in passing through the kidneys is divested of its urea, but not of its oxygen

It is now narrowed down to this, viz: We find poisonous principles in the blood everywhere; we find only one—cholesterine—in the blood of the renal vein. Everywhere else in the body, from two to three poisonous

principles are found. Now here is the question: Is cholesterine more poisonous, by itself, in the renal vein, than when found in connection with urea in the pulmonary vein?

W. E. JINKINS, M. D.,

REDDING, MISS.

CHLORAL HYDRATE IN LABOR.

For a great many years I have been using hydrate of chloral in cases of labor, with remarkable results. When I am called to attend a woman in labor and find the os undilated or rigid I invariably inject into the rectum 30 grains of hydrate of chloral dissolved in about four ounces of warm water, with a little starch added. I have used this means for such cases for eight years, and have failed to get any but the most flattering results; in fact I can not praise the method too highly. On the 28th of this month I was called to a case of placenta previa; the woman had been flowing all night, and when I got there, at 6 o'clock, A.M., she had lost much blood. I found the os rigid and undilated. I immediately injected my favorite remedy, and in less than three minutes the os was dilated so that I could readily pass my hand into the uterus, and it relaxed also the rectum, vagina and perineum. The drug never failed me yet in this connection, and I would like to commend it to others who may not have used it.

I have had excellent results with it, also, in cases of dysentery. Injected into the rectum, it will surely relieve tenesmus, either of rectum or urethra.

I do not claim to be the originator of this method of using chloral in labor, having seen an article on the subject in the Therapeutic Gazette, I think nine or ten years ago. I have forgotten who wrote it, but the author recommended it for dilatation of the os. I tried it then and found it all he said, and have used it always since.

J. Z. SCOTT.

SCANDIA, KANSAS.

STYLOSANTHES.

MRS. T. B., five months advanced in her third pregnancy, complained of great irritability of uterus and almost continued pain, like severe neuralgia, severe enough, as she expressed it, "to drive her crazy." Had suffered similarly in the two previous pregnancies without getting any relief, except temporarily, from opium. On her applying to me, I had, fortunately, a sample of stylosanthes which a representative of Parke, Davis & Co. had left me. I put her on it, and almost immediately she was relieved. She went through most comfortably to her confinement, was delivered of a ten-pound boy, and made a good "getting up." In her former confinements, she told me, that for three months afterwards she was an invalid. This is the only case in which I have had an opportunity to use the drug, and certainly it proved a great satisfaction to me, and, as my patient put it, an unspeakable benefit to her.

GRINDELIA SQUARROSA.

This drug I have used for such a length of time that when I prescribe it I don't feel that it is an experiment. In this malarial district hypertrophy of spleen is quite common, and the former treatment of it was unsatisfactory, but now, with grindelia squarrosa, and whatever adjunct treatment that may be indicated, it is quite an easy matter to effect a cure. Men, particularly, come in from quite long distances to get treatment, and I find that the drug is not known or used by the profession as it should be, especially in ague districts. If it were used only for this one condition, the value and satisfaction of the result to the physician would be an item not to be overlooked.

WM. SEMPLE, M. D.

PADUCAH, KY.

ADONIS VERNALIS.

My attention has been called to ext. adonis vernalis fluid. The drug itself (the herb) was referred to me for trial, which I prescribed in infusion of ʒ ss. to 6 oz., in heart troubles, with good results, finding it to act like digitalis and more reliable as to its action. Adonis vernalis has more of the good effects of digitalis and less of its evils. The heart-beat increases in force, and the heart sounds of defect may easily be noted. The pulse also shows its action. I am so far satisfied as to its virtue, and also prescribe it in asthmatic trouble, so far with good results.

G. J. HERRMANN, M. D.

ST. LOUIS, MO.

The *emeute* at Ann Arbor has been quelled, and an armed peace again prevails. The "regular" professors, instead of furnishing the homœopathic students with certificates of their proficiency in the branches in which they have taught them, will in future furnish the President of the University with such certificates, and on the strength of them he will certify to the homœopathic department.

The relation of the two schools at Ann Arbor is unnatural, and the interests of each would be subserved by a complete separation. It would, at least, prevent many embarrassing situations.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., APR. 11, 1887.

Notes.

Dr. Madigan, of Brooklyn, takes ground against immediate perineorrhapy after parturition. In an article on the subject, in the Medical Standard, he advises, as the result of his practice, that in cases of laceration of perineum, the patient should be placed on her side with her knees bound together, and apposition of the raw surfaces maintained by means of pads. Absorbent cotton should be placed over the laceration and the parts washed with an antiseptic, alcoholized aqueous solution. Union under such treatment is, he says, the rule, and should it not occur, the woman is in much better condition for an operation two months after delivery than immediately after. He fortifies his position by reference to the principles of pathology as laid down by Billroth. We heartily concur with him, and have never found it necessary to perform perineorrhapy in cases in which the sphincter ani was not involved. The immediate operation has always seemed to us an unnatural procedure.

Referring to the note-reference in our last on the little jangle between the regulars and the homœopaths at Ann Arbor, several correspondents have requested us to state why, in our opinion, a homœopath is not as regular as a "regular" so-called. One of these claims that the homœopaths are, as a matter of fact, *the* regulars, inasmuch as they are "governed by rule" (Webster) while the "regular" boasts his freedom from such government—claiming it as his prerogative to prescribe according to any or all rules, or emperically, as he may elect. The demands on our space prevent a compliance with the request in this issue, but we shall refer to it when there is a less liberal supply of the more important matter which appears this time.

There is blood on the face of the moon in St. Louis. Dr. Love, of the Weekly Medical Review, and Dr. Todd, of that city, have had a personal altercation, in which blows were exchanged, growing out of an editorial criticism of the latter by the Review. The matter promises to develop into something serious, a duel being talked of as a possible outcome. We hope that cooler counsels will prevail. It would be a disgraceful thing for doctors to resort to such extremes, and more especially for such as are the outspoken champions of the Code of Ethics of the American Medical Association.

Dr. N. L. Folsom writes anent an article in The Age, of Feb. 10, page 63, that gave an account of a woman who had her voice restored, and her paralyzed limb cured, by having a bullet thrown accidentally into her paralyzed limb: In 1878 an old man, a shoemaker of extreme deafness, was cured of his deafness by a severe paralytic shock of one side, so that he heard the rest of his life, several years, as well as most persons. The philosophy of the cure of my patient I am unable to give, but perhaps some one can.

J. Milner Fothergill is one of the poetic members of the profession. Hear him in writing up the extract of malt: "An extract of malt with an ærated water is a drink for the gods, from Cupid to Neptune," and we don't suppose he gets any more a line for such a puff than is given for the common prosaic testimonial.

Dr. John E. Clark, Professor of Chemistry in the Detroit College of Medicine, has promised an article for our next issue, on the preparation of sulphuretted hydrogen and the method of its application in affections of the lungs. Correspondents who have written us on this subject will in this article be given explicit answers to these questions.

Mr. Beecher was once asked how he thought he should feel when he came to die. "You will probably feel stupid," replied the preacher, referring to the kindly provisions of nature in benumbing their faculties when putting her children to sleep.

An oysterman, whose saloon used to be on Maine street, was the slowest man in the state. One day he died, and soon after a citizen said to Erastus, the oysterman's son: "Erastus, your father died rather sudden, didn't he?" "Well, yes," said Erastus, "sudden for him."

The Medical Record is authority for the statement that the prescription of fluid ext. rham. cat. for a Philadelphia spinster caused the physician's discharge from further attendance on the case.

Medical Progress.

SALOL IN ARTICULAR RHEUMATISM.—By PROF. HERRLICH, of Berlin. An address on salol and its employment in articular rheumatism and other acute febrile diseases, was delivered before the Berlin Medical Society on Jan. 10th by DR. HERRLICH. He first referred to the investigations made by NENCKI and SAHLI into its composition and therapeutical effects. According to these observers it is a salicylate of phenic ether, resembling fat in its behaviour in the system in being decomposed by the pancreatic ferments into free acid and alcohol—salicylic acid and phenol. Salol is a colorless crystalline body with a weak aromatic odor, is almost tasteless, and practically insoluble in water. It never produces nausea, like salicylate of soda, and is more readily taken. SAHLI treated nearly all the cases of articular rheumatism in the poliklinik with it in daily doses of 6 to 8 grammes in individual doses of 2 grms. each. It was always well borne in these doses. A strong salicylic acid reaction was found in the urine two hours after the first dose. There was no fear of carbolic urine appearing after the doses given. The drug contained 40 per cent. of phenol and 60 per cent. of salicylic acid. There was no doubt that the antipyretic action was due mainly to the phenol. Singing in the ears was not always avoided, nor were endocarditic complications.

In addition to the good effects in acute and subacute articular rheumatism, a prompt action was observed in several cases of neuralgia in which salicin had proved inert, and also in *erythema nodosum* and *multiforme*, urticaria, and peliosis. In phthisis Sahli recommends it in doses of only 0.5 grm. It is useful in all cases of diabetes.

Further indication for its employment on account of the local antiseptic action of both its constituents as set free in the duodenum were noticed. It is highly probable that it acts antiseptically in the intestinal canal, and it will therefore probably prove useful in intestinal catarrh, typhoid and cholera.

Syphilitic and other ulcers were rapidly healed by being painted several times a day with salol in powder. It was also found useful in ozæna and otorrhœa, and a 3 per-cent. solution formed an agreeable antiseptic mouth wash.

HERRLICH had used it in 25 cases of acute articular rheumatism, in a series of cases of chronic rheumatism, and in some cases of muscular rheumatism, lumbago, etc. It showed itself of decided benefit in the acute form. He could not say what part the carbolic acid played; in any case the action was so rapid and striking that six drachms of salicylic acid did not correspond to it, so that it might be assumed that the carbolic acid played a part in the rapid improvement. Relapses and endocarditic complications were uninfluenced by it. *Medical Press and Circular.*

THE INDUCTION OF LABOR BY ELECTRICITY.—The fact that an electrical current is capable of exciting muscular contraction, and the knowledge that such contraction, once fairly established in a pregnant uterus, is likely to end by the expulsion of the uterine contents, have led many to look upon electricity as the best means, at least theoretically, by which to induce labor. Practical experiments, however, have failed to sustain this opinion. Electricity has been applied to the pregnant uterus with both electrodes in the vagina, with one in the vagina and the other on the abdomen, and again with both electrodes externally, with the result, it is true, of inducing labor, but only with such time and trouble as to render this method unavailable in general practice.

The latest contribution to the study of the subject can be found in the Centralblatt für Gynäkologie, in which DR. LITSCHKUS describes two cases of labor, induced by electricity, both electrodes being placed upon the abdominal walls. In one case eleven applications of a faradic current, lasting about fifteen minutes, and distributed over eight days, finally brought on labor. In the other case, six applications, during five days, resulted in a dilatation of the os sufficient to admit two fingers, when the dilatation was artificially increased, and the child delivered by podalic version.

It cannot for a moment be supposed that a busy practitioner could devote a week or more to the induction of labor in any individual, especially when he has at his command means more certain, more rapid, and as little dangerous, if antiseptic precaution be taken, as the external application of electricity.—*Med. New*, Feb. 26.

NEW FORM FOR ANTISEPTICS FOR INJECTION—MEUNER, in the *Bulletin Général de Théra. peutique*, January 30, 1887, gives the following formulæ which he has used successfully upon animals and human subjects:

1.—Iodoform, chemically pure, 1 (by weight).
Liquid vaseline, 100.

Pulverize the iodoform and add the vaseline slowly, and triturate carefully. Filter through two papers; keep the liquid in a flask of yellow glass, similar to those used by photographers, with ground-glass stopper.

2.—Pure menthol, 10.
Liquid vaseline, 90.

Melt the menthol in the vaseline at gentle heat over a water bath. Filter twice.

3.—Pure thymol, 1.
Liquid vaseline, 100.

Prepare as above.

5.—Iodine, 1.
Liquid vaseline, 100.

Triturate the iodine at low temperature with the vaseline; filter three times; preserve in yellow, glass-stoppered flask.

6.—Camphor, 1.
Liquid vaseline, 100.

Triturate at low temperature with the vaseline, and filter three times. Berzélius's filter papers should be used.

The dosage and choice of a mixture must be determined by the clinician; these substances diffuse rapidly, and considerable doses can be obtained by a few injections; it is not difficult

to saturate an organism by this method.—*Med. News*, Feb. 26.

THE VALUE OF INDIAN HEMP IN THE TREATMENT OF A CERTAIN TYPE OF HEADACHE.*—The headache to which I wish to draw attention is of a dull, continuous, or subcontinuous character, attended sometimes with paroxysmal exacerbations. What is especially characteristic of it is its constancy. Patients will tell you that they rise with it in the morning, are troubled with it all day, and carry it to bed with them at night. If by chance they awake in the night, they find their head is aching. The headache may in some cases become aggravated as the day advances, but sometimes the opposite condition obtains, and the headache is worse at the early part of the day. The situation of the headache varies; it may be frontal, temporal, or occipital, or, more rarely, vertical. Usually, however, it is diffused. It is not as a rule attended with local soreness or tenderness. Nausea may be present, but is not constant; vomiting is usually absent. In some cases, distinct exacerbations, sometimes of great severity, occur. As these subside, they give place to the dull continuous headache that preceded their advent. As a rule, the ocular phenomena characteristic of migraine are absent, and the headaches are not usually hemicranial. Constipation is present in a certain number of cases, but removal of the constipation does not cure the headache. In some cases, it is associated with disorders of digestion, but the same remark applies to these as to constipation.

Headaches of this type may last for weeks, months or even years. They occur in persons of different ages, but are, perhaps, most common in the middle period of life, and in young adults. Several of my best-marked cases have been in medical students. Patients so suffering are usually able to pursue their usual avocations, except, perhaps, during paroxysmal exacerbations, especially when their work is of an active rather than a sedentary and intellectual character. Thus medical students have been able to attend to their dressing and other duties at the hospital, but when they have attempted to read they have found it impossible: the headache prevented the full engagement of their attention.

As to the nature of these continuous or chronic headaches, I do not intend to offer a decided opinion, but I hope further experience will reveal it. All I can safely affirm is that they are not due to peripheral irritation or anæmia. They do not seem to be of the nature of megrim—at least in the majority of cases. I have thought they may be due to some dyscrasia or diathesis. In a few cases it has seemed a slight malarial taint might be present: in others, gout or rheumatism appear a possible cause. These, however, are conjectures only, unsupported by sufficient positive evidence to warrant definite conclusions.

For the relief of headaches of the class I have described, I have found Indian hemp of the greatest service. In the majority of cases, it cures the complaint. The one element of the headache which, in my experience, indicates the probable success of the remedy, is its continuous character.

The preparation of Indian hemp I always employ is the extract. I begin by giving one-third or more (usually half a grain) night and morning, or occasionally three times a day. If at the end of a week some amelioration of the headache has been procured, I advise its continued use in the same doses; but if little or no improvement has taken place, I increase the dose to one grain at night and half a grain in the morning. If this is insufficient, I increase the dose so as to make it one grain night and morning; this failing, I increase it by half-grain doses, giving the maximum dose at night, until two grains at night and one and a half grains in the morning are reached. I have scarcely ever had occasion to exceed these doses. There are two points I wish to urge: 1. The gradually-increasing dose. 2. Steady perseverance in its employment. The treatment must be as obstinate as the disease.

Given in these doses, usually no inconvenience is experienced by those taking cannabis indica: but a few patients have complained of a feeling of slight confusion or giddiness, in no way so annoying as the condition for which it was administered.

The length of time over which treatment has to be continued varies in different cases: usually, it extends over several weeks, but rebellious cases may require a treatment of two or three months. As the malady recedes, the dose should be reduced, and it is advisable to continue the administration of the remedy for a week or two after the headache has disappeared.

In the majority of cases, the Indian hemp may be given alone, with compound glycyrrhiza powder, powdered valerian, or extract of gentian, as excipients. My largest experience has been gained in many years out-patient practice, where, for therapeutic testing and teaching purposes, simplicity has been studied. It by no means follows, however, that because our patient has a headache, we are not to relieve his other sufferings. Thus, when constipation is present, as it is in a fair number of cases, some aperient may conveniently be combined with the hemp; aloes-and-myrrh pill, compound rhubarb pill, in small doses, may be added to the cannabis indica. Where flatulence troubles the patient, compound assafœtida pill, carbolic acid, or quinine, separately or combined, may be given with the Indian hemp in a pill.

Case 1.—A medical student of the London Hospital consulted me on May 6th, 1881, for headache. For several weeks—five at least—he had suffered from dull, continuous frontal headache. He woke up in the morning with it, and had it all day, and it increased in severity as the day advanced. He was able to do his active duties at the hospital, but it entirely prevented him reading, and interfered with his sleep at night. He had, under advice, tried various remedies, none of which had afforded him any relief. He suffered slightly from constipation. I ordered him a pill containing half-grain doses of extract of cannabis indica. The same night he had better sleep than he had had for some time previously. He took the pills regularly, I believe, for some weeks. The headache gradually wore off, and he has had no return of it. He has since himself ad-

*Read at the Section of Therapeutics and Pharmacology at the Annual Meeting of the British Medical Association at Brighton.

ministered the drug to others suffering in like manner.

Case 2.—Mr. C. G., aged 22, a very active young man, assisting his father, a contractor in a large way of business, consulted me once on July 11th, 1884, for headache and constipation. I prescribed a vegetable and saline aperient, and did not see the patient again until October 20th of the same year. He had derived no benefit from the treatment I had ordered. I inquired more particularly into his case, and made the following notes. During the five years that he lived at Walthamstow, in Essex, he had headache almost continuously for three years. He then came to live in London, when it improved, but had again returned. The present attack had lasted nearly the whole of the present year—nine months. The headache was chiefly at the back of the head, and was usually of a dull, heavy character, increasing at times to such a degree as to prevent him attending at all to his business. He said: "I feel as if I could knock my head against the wall,"—in the exacerbations, that is. He occasionally had nausea, but no vomiting. His brothers and sisters do not suffer from headache. His father is a patient of mine suffering from heart and kidney disease, and has occasional attacks of gout. He was ordered the following pill: ℞ Ext. cannabis indicæ, gr. viij; quiniæ sulph., gr. xxiv; pil. rhei co. gr. xxxvj; M. Ft. pil. xxiv; one to be taken night and morning. He was also given a stomachic mixture.

On October 31st, the pill was modified to ext. cannabis indicæ, gr. xij; quiniæ sulph., gr. xij; pil. rhei co. gr. xxxvi. M Ft. pil. xxiv. One pill night and morning. The headache was less, but still had the same characters.

On December 5th, the headaches were much less; he had no exacerbations, but constant slight headache. He was now ordered to take two pills at night and one in the morning.

On February 18th, 1885, I have the following note in my case-book: "Has come to report himself as cured. He has been free from headache since three weeks before Christmas, when he had it for three days, but it subsided with the pills. Is well and hearty in all ways."

In this case, quinine was prescribed in conjunction with the Indian hemp, under the idea, created by residence at Walthamstow, that malaria might have a share in the production of the headache. The quinine may also have had a share in the cure; but I have seen exactly similar cases where there was no reason to believe that malarial influences were at play, and where Indian hemp alone sufficed to remove the complaint. The compound rhubarb pill served to regulate the bowels satisfactorily.

Case 3.—M., aged 42, a rather stout, heavy-looking man, was for sixteen years a station-master on the Great Western Railway, but for the last fifteen months has kept a public-house in a village in Hertfordshire. For the last seven years he has suffered from "neuralgic" pain in the head, and slightly in the face. It was this which led him to give up his former post, as it rendered his duties almost impossible. The pain in the head is not quite constant, but he rarely goes three days without it. The individual attacks, or paroxysms, generally last about three days. He feels the pains on such occasions at whatever hour he awakes; it becomes intensified when he rises, lasts through the day and night, and then gradually wears off. He feels sick, and has pyrosis previous to, and during the attacks—not at other times. He suffers a good deal from flatulence. His bowels act regularly twice a day. He is a very temperate man. His father suffers from gout; he himself has not had it, but suffered from sciatica four years ago. Physical examination revealed nothing abnormal in the chest, and there were no changes in the optic nerve or retina. Knee-jerks normal; urine not obtainable. He was ordered, on February 26th, 1884, a mixture of bismuth, gentian, and strychnine, and the following pill: ℞ Ext. cannabis indica, gr. vj; pil. assafœtidæ co. gr. xlviii; quiniæ sulph. gr. xxiv; acid. carbolic., gr. vj; ol. cajaputi, gr. xij. M. Ft. pil. One to be taken night and morning. If the pain is not relieved in a week, take two pills night and morning. The assafœtida, quinia, carbolic acid, and cajaput were combined with the Indian hemp to relieve the flatulence.

March 11th. Headaches less frequent, but has had one very bad attack, lasting three days. Less dyspepsia and flatulence. Urine 1018; deposits pale lithates, but is free from albumin. Easton's syrup substituted for the bismuth mixture, and the dose of cannabis indica in the pill increased to half a grain. To take a pill night and morning; two pills at night, if the pain is severe.

March 25th. No pain since last visit; feels quite a different man. To take the pills only.

April 22d. Only one attack, moderately severe, fourteen days ago. He persevered with the pills for some little time longer, and lost the pain entirely.

Case 4.—Miss D., aged 22, a rather tall, not unhealthy-looking girl, consulted me on April 7th, 1886. She had suffered for several months from headache. At first it was occasional, lasting a week, or two or three days, and then leaving her. Lately it has become constant. It is chiefly on the left side and forehead and over the eyes. Exacerbations of considerable severity occur, not traceable to any particular cause, and not occurring at any special hour of the day. They are not influenced by the catamenial periods, which are regular, as also are the bowels. Other members of the family were not subject to headaches. Her complaint dates from a fright, when she saw a man nearly killed. No signs in the chest; no change in the eyes. She was ordered the following pill: ℞ Extract cannabis indicæ. gr. xij; pil. aloes et myrrhæ, gr. xlviij; ext. gent., gr. xxiv. M. Ft. pil. xxiv. One pill night and morning.

April 28th. Headaches much better; has had pain, apparently rheumatic, in feet; gets easily tired; appetite not good. Ordered quiniæ salicylatis, pil. aloes et myrrh ää gr. ij. Ft. pil., three times a day.

I heard of her at the end of July, and she was free from headache.—STEPHEN MACKENZIE, in *British Med. Jour.*

ANTISEPTIC TREATMENT IN SUMMER DIARRHŒA.—At a recent meeting of the Academy of Medicine, DR. L. EMMET HOLT read a paper on the "Antiseptic Treatment of Summer Diarrhœa," which seems likely to have a marked effect upon the manner of dealing with this affection in the future. As he truthfully remarked, an examination of even the most recent

text-books on the diseases of children will show that practically the same methods of treatment are inculcated which were in vogue fifty years ago; so that there would certainly appear to be some "room for improvement."

DR. HOLT said that he made use of the term summer diarrhœa as designating an affection with which all were familiar, but which did not involve any points of pathology about which there might be differences of opinion. While acknowledging the prime importance of suitable hygienic conditions in the treatment, it did not come within his province on the present occasion to discuss these. With the exception of cases of pure cholera infantum, all cases of pure summer diarrhœa are, in his opinion, due to fermentation or putrefaction in the intestinal tract. Among the factors entering into the causation of the trouble he mentioned heat, improper feeding, and bad hygienic surroundings. The affection was evidently not due to heat alone, or else we should find the greatest mortality among infants under six months of age; which was not the case. During the first six months a much larger proportion of infants were wet-nursed than at a later period, and it was after this age that the greatest number of deaths were noted.

In treating of the influence of heat he spoke not only of its effect upon the child, but upon its food, and referred to an instance at the New York Infant Asylum in which no less than twenty-three children became affected with diarrhœa from the use of tainted milk. In tenement-houses all the conditions were especially favorable to the contamination of this article of food, and it was only a wonder that more children did not suffer from this cause than was actually the case. In this connection he spoke of the development of poisonous ptomaines from food, and alluded particularly to the investigations of PROFESSOR VAUGHAN, of the Michigan State Board of Health, in regard to the principle which he had designated tyrotoxicon. BRUNTON'S researches had also, he thought, furnished the solution of many hitherto insoluble problems. Cerebral symptoms had been generally supposed to be due to the sudden stoppage of the diarrhœa: but HUCHARD had shown that poisonous ptomaines were evolved from human fæces even in a state of health, and this was the case to a much more marked extent in such diseases as summer diarrhœa.

In this affection DR. HOLT went on to say, the inflammatory changes are almost entirely confined to the large intestine. A specific microbe having a causative relation to the disease had not as yet been demonstrated; though numerous bacteria, of various kinds, were always found in connection with it. The indications for treatment were as follows: 1, clear out the bowels; 2, stop decomposition; 3, restore healthy action to the bowels; 4, treat the consequential lesions.

In the first place, it was necessary to clear out the bowels for the same reason that the surgeon thoroughly cleanses a wound before applying his antiseptics. In nearly all cases, DR. HOLT said, he began his treatment with a cathartic, in order to remove the altered secretions; and if the stomach was not very irritable, there was no purgative to be compared to castor-oil for this purpose. If the stomach was irritable, he was in the habit of using large injections of water by means of a fountain syringe. By experiment he has found that it takes almost a pint of fluid to reach the ileo-cæcal valve, and at least this quantity, he thinks, should be used. In many cases the castor-oil was all the medicine that was required, as a suitable dietetic and hygienic regimen would complete the cure. In cases in which the passages, consisting of pure serum, were odorless and alkaline in reaction, no preliminary cathartic was required.

In order to arrest decomposition and restore healthy action to the bowels, the most efficient agent that he had met with was salicylate of sodium. If there was much vomiting, it was better to withhold food altogether for from ten to twenty-four hours; employing carbonic acid water, or thin barley water, for allaying thirst. In children under 2 years of age no milk whatever should be allowed; though peptonized milk was less likely to do harm than either condensed or ordinary cow's milk. He had known many relapses to be brought on by the use of milk.

The treatment of consequential lesions, the fourth point considered, consisted in 1, appropriate dietetic treatment; 2, the continuation of the antiseptic: and 3, the washing out of the whole large intestine every day with pure water or a weak antiseptic or astringent solution. The medicinal agents which he preferred for these injections were benzoate of soda and nitrate of silver. It was a fact, he said, that all the drugs that had hitherto proved of service in the treatment of summer diarrhœa, with the exception of opium (in regard to which there had been much discussion), were of more or less antiseptic nature. He then proceeded to give a *résumé* of the history of the use of antiseptic remedies proper in this affection, from the year 1846, when creosote was first employed for its relief.

In order to find out what is the present practice in New York institutions, DR. HOLT has written to the physicians of fourteen of these, including the Nursery and Child's Hospital, the Foundling asylum, St. Mary's Hospital for Children, the Demilt Dispensary, and a number of other prominent hospitals and dispensaries, in which upwards of 40,000 children —25,000 of them for diarrhœal diseases—are treated annually; He ascertained, among other facts, that opium was used in all, bismuth in all, chalk mixture, with paregoric and astringents, in quite a number, castor-oil as a preliminary medication in six, castor-oil in emulsion, with equal parts of the oil and paregoric, in three, calomel in three, ipecac in three, pepsin in one, iodoform in one, morphia and atropia hypodermically in one, and astringent injections in three.

In his own experience DR. HOLT found that with the use of opium, bismuth and astringents, 50 per cent. of cases are cured, and 7 per-cent. died; the remainder being classified as improved and unimproved. A year ago last summer he first commenced the use of salicylate of sodium. In about two-thirds of the cases in which he employed it he gave castor-oil as a preliminary to the treatment, and out of 81 cases, 60 were cured, 14 improved, 6 unimproved, and 1 died. He also treated 44 cases with naphthaline, 22 with resorcin, and 28 with bichloride of mercury. The comparative results of the different remedies were as follows: Cured by opium,

bismuth and astringents, 50 per-cent.; cured by salicylate of sodium, 84 per-cent.; cured by napthaline, 67 per-cent.; cured by resorcin 55 per-cent. He, therefore, considers the salicylate of sodium the most efficient remedy; and next to this comes naphthaline.

Having related an illustrative case in which the sodium salicylate, administered after a preliminary dose of castor-oil, had effected a cure in an apparently hopeless case, he stated that he is in the habit of giving this remedy in doses of from 1 to 3 grains in aqueous solution, every two hours; and recommended that it should be administered with the food or drink. It did not produce vomiting, but, on the contrary, often allayed irritability of the stomach. Naphthaline could be given in doses of from ½ grain to 5 grains, and resorcin in doses of from ½ grain to two grains. Bichloride of mercury, which should be given in doses of from $\frac{1}{120}$ to $\frac{1}{60}$ of a grain, was sometimes apt to produce vomiting. DR. HOLT said that he did not undervalue the efficiency of opium in other forms of diarrhœa.

In conclusion, he stated that the use of evacuants constituted an essential part of the antiseptic treatment of summer diarrhœa, and that he considered the latter especially valuable because it was aimed at the cause of the trouble in the intestinal canal, and not simply at its effects.

A NEW TREATMENT OF FEVERS.—M. ALBERT ROBIN, who so admirably combines a thorough knowledge of physiological chemistry with medical learning, has just published, in the Gazette Médicale de Paris, of December 25, what he calls "A New Therapeutic Method; or the Oxydizing Method in the Treatment of Fevers, and particularly of Typhoid Fever." In this communication he directly combats the accepted ideas as to the antipyretic treatment of fevers, and he does this in accordance with new grounds which are "more in accord with our knowledge of the state of nutrition in pyrexia." From the chemistry of nutrition in typhoid fever M. ROBIN lays down the three following propositions: 1. The elevation of febrile temperature does not depend on an increase of organic oxydations. 2. During fever there is retention in the organism of but slightly soluble waste, eliminable with difficulty, and generally toxic. 3. Organic disintegration is very much increased during fever. He now wishes to establish the *first therapeutic principle* to which the chemical study of nutrition in fever leads, and to show that so far from seeking to impede oxydations therapeutics should tend, on the contrary, to make them as active as possible, since, contrary to the classic opinion, the oxydations undergo a remarkable diminution in typhoid fever. Now perfect oxydation gives rise to soluble products, easily eliminated, and almost deprived of toxicity; while other chemical reactions give rise to only slightly soluble waste matter, which is eliminated with difficulty, and usually has considerable toxicity.

M. ROBIN next proposes to prove that oxydation is diminished in typhoid fever. "It has been believed, though wrongly, for a long time that the production of heat is subordinated to organic oxydation. But it is now known that oxydation is not the exclusive source of animal heat and of febrile pyrexia; and it is also known that disassimilation is accomplished by the successive acts of which the first are hydrations and chemical combinations, which give rise to products which are only secondarily overcome by oxydation, and that animal heat results from the *ensemble* of all these reactions. And in typhoid fever, as the acts of oxydation are decreased the part played by oxydation in febrile pyrexia should be proportionately reduced. Now, in reality, the co-efficient of oxydation* is less in typhoid fever than in the phlegmasiæ, and even less than in the normal state, since it is not above 74 per 100, while physiologically it is 85 per 100. Again, the proportion of urea is in inverse ration to the gravity of the disease; and, thirdly, the excretion of carbonic acid of the typhoid fever patient is to that of the healthy man as 83.8:100. It is therefore vain to attempt to restrain oxydation so as to lower temperature, since this would be assisting the disease. The aim of therapeutics in these cases should be to regulate organic disintegration, and thus to favor oxydations instead of hydrations and chemical combinations, so that the products of tissue-waste, having undergone more perfect evolution, may be easily eliminated and rendered as little noxious as possible.

There are, therefore, according to M. ROBIN, two great therapeutic indications. 1. To eliminate from the treatment of typhoid all measures and medicines which retard oxydation. We must, from this point of view, revise all our antipyretics. 2. The second indication is to favor, in every way possible, the organic oxydations which will diminish the formation of extractives, of ptomaines and leucomaines, and which, at the same time, attacking those products already formed, will assist in their elimination by oxydation, or in other words, will make them more soluble and less toxic. In regard to the first indication: sulphate of quinine retards disintegration without diminishing oxydation, provided it be given in small or broken doses; in large doses it lessens oxydation and the absorption of oxygen at the same time. It should therefore be given in small and broken doses. Antipyrin diminishes nitrogenous disintegration, but at the same time diminishes still more the oxydation of disintegrated nitrogenous matters. It increases the amount of uric acid, and diminishes the amount of urea; that is to say, it increases the amount of less soluble and not easily eliminated waste matters, while it lessens the vehicle which should carry them off. It increases the excretion of potash; which is to say, it demineralizes (as regards potash) the red blood globules. Other antipyretics have been tested, and will be treated of in a later communication. How is the second indication to be effected? 1. By maintaining in the air to be respired by the patient oxygen in sufficient quantity. 2. By keeping the respiratory apparatus, which is the port of entry of oxygen, in as perfect a state as possible. 3. By stimulating the nervous system, which exercises a direct influence on oxydation (cold spongings and baths increase the coefficient of oxydation, and regulate the proportion between the phos-

*In excessive assimilation the quantity of urea is increased, and decreased in defective disintegration, according to ROBIN. To ascertain if the urea is increased it must be compared with the total quantity of urinary solids; and to express this relation he invents the term *coefficient of oxydation*.

phoric and the urinary nitrogen (probably by the assistance of the reflex stimulation which they exert on the nervous system). 4. By choosing among the different drug those which cause increase of oxydation. As to the chlorine salts, while they furnish some oxygen to the system, they must be given in large doses for this purpose; and as these large doses are toxic, these salts should be rejected. The iodine and bromine salts are more easily reduced than those of chlorine, but the question of their toxic action on the red globules is not yet solved. We must therefore turn our attention to drugs which favor the absorption of oxygen or set free oxygen. Among the agents which will fulfil this indication are alcohol in small doses, common salt, the alkalies, the salts of organic acids, and the free ingestion of liquids.

As has been already said, the second therapeutic principle, derived from the chemical condition of nutrition during typhoid fever, is to favor the elimination of retained waste matters. This has already been made by a special study, one of the conclusions of which is that a number of the so-called antipyretics, among which may be mentioned the salicylates, do not diminish intra-organic oxydation, but act on the temperature, and assist in eliminating in a soluble form, the slightly soluble extractives of the system. We may then speak of this new method as "the removal by solution of incompletely oxydized organic residue." The third principle, the restraining of the disassimilation which is so exaggerated in fevers, will be further studied by M. ROBIN.—*Journal of American Medical Association.* Jan. 15.

THE DIETETICS OF PULMONARY PHTHISIS.—DR. ALFRED L. LOOMIS, of New York, thus formulates the most important rules which govern the dietetics of phthisis :—

1. Every phthisical patient should take food not less than six times in the twenty-four hours. The three full meals may be at intervals of six hours, with light lunches between.

2. No more food should be taken at any one time than can be digested easily and fully in the time allowed.

3. Food should never be taken when the patient is suffering from bodily fatigue, mental worry or nervous excitement. For this reason, midday naps should be taken before, not after, eating. Twenty to thirty minutes rest in a recumbent posture, even if sleep is not obtained, will often prove of more value as an adjunct to digestion than pharmaceutical preparations.

4. So far as possible, each meal should consist of such articles as require about the same time for digestion, or, better still, of a single article.

5. Within reasonable limits, the articles of any one meal should be such as are digested in either the stomach or intestine alone, *i. e.*, the fats, starches and sugars should not be mixed with the albuminoids, and the meals should alternate in this respect.

6. In the earlier stages the amount of fluid taken with the meals should be small, and later the use of some solid food is to be continued as long as possible.

7. When the pressure of food in the stomach excites cough, or when paroxysms of coughing have induced vomiting, the ingestion of food must be delayed until the cough ceases, or an appropriate sedative may be employed. In those extreme cases where every attempt at eating excites nausea, vomiting or spasmodic cough, excellent results are attained by artificial feeding through the soft rubber stomach-tube.

8. So long as the strength will permit, assimilation and excretion must be stimulated by systematic exercise, and when this is no longer possible, the nutritive processes may be materially assisted by passive exercise at regular intervals.

The following may serve as a sample menu for a day in the earlier stage. The meat soup is made by digesting finely chopped beef (1 lb.) in water (Oj) and hydrochloric acid (5*m*) and straining through cheese cloth.

MENU.

On waking—One-half pint equal parts of hot milk and Vichy, at intervals through half an hour.
8 A. M.—Oatmeal with abundance of cream, little sugar: rare steak or loin chops with fat, cream potatoes; soft boiled eggs, cream toast; small cup of coffee, two glasses of milk.
9 A. M.—Half-ounce cod-liver oil, or one ounce peptonized cod-liver oil in milk.
10 A. M.—Half-pint raw meat soup; thin sliced stale bread.
11-12.—Sleep.
12.30 P. M.—Some white fish: very little rice; boiled or stewed chicken; cauliflower; stale bread and plenty of butter; baked apples and cream; milk, Kumyss or Matzoon, two glasses.
2 P. M.—Half-ounce cod-liver oil, or one ounce peptonized cod-liver oil and milk.
4 P. M.—Bottle Kumyss or Matzoon: raw scraped beef sandwich.
5.30-6 P. M.—Rest or sleep.
6 P. M.—Some thick meat or fish soup; rare roast beef or mutton: spinach; sliced stale bread; custard pudding; ice cream.
8 P. M.—Half-ounce cod-liver oil, or one ounce peptonized cod-liver oil and milk.
9-10 P. M.—Pint iced milk: cup meat soup.
1-2 A. M.—Glass milk, if awake.

American Med. Digest.

FEEDING AFTER SURGICAL OPERATIONS.—DR. JAS. B. HUNTER, of New York, holds that the surgeon should not consider his responsibilities at an end with the performance of a given operation, but should extend his care and supervision to all the details of the after-treatment, the first and chief of which is the proper nourishment of the patient until convalescence is established. The points emphasized by the author (*Medical Record* Dec. 18, 1886) are these: '1. That personal attention should be given, with precise directions, to the nourishment of patients after all surgical operations, and that too much should not be entrusted to nurses, who can have no means of knowing the varying requirements of individual cases. 2. That vomiting is to be avoided by every means in our power, even if it require absolute rest of the stomach for several days. 3. That even appropriate food, where it can be borne, should be given only in very small quantities, and at regular intervals. 4. That systematic nourishment by the rectum should be resorted to promptly if other means fail or are insufficient. 5. That less food and more water should be given if the patient suffer from fever. 6. That the dangers caused by vomiting, by flatulence, or by food difficult of digestion, are much more to be dreaded than those due to abstinence from food. 7. That stimulants are of great value, where needed, to meet special indications, but may be generally discontinued as soon as food

can be digested.' It will be found, as a rule, DR. HUNTER states, that after prolonged anæsthesia the stomach is proportionately longer in recovering its tone. It is held that, when the stomach continues to reject food, systematic rectal alimentation should be resorted to after the second day. DR. HUNTER has not much faith in milk in this form of nourishment, but prefers some preparation of beef, such as strong peptonized beef-tea, beef peptonoids, and especially, in critical cases in which nourishment by the rectum is the chief dependence, a mixture of pulp made by scraping raw beef with half of its bulk of pancreatic emulsion. This mixture is allowed to stand in water considerably below the boiling-point until it liquifies and assumes an homogeneous chocolate-like appearance. Two fluid ounces of this mixture should be administered not more frequently than every four or five hours.—W. JOHNSON SMITH.

THE TREATMENT OF THREAD-WORMS IN CHILDREN.—DR. SIDNEY MARTIN writes as follows to the Practitioner of October, 1886:

The complete cure of thread-worms in children is often very difficult. While the ordinary methods used, such as rectal injections of salt and water, infusions of quassia, and other remedies, do for a time, yet they often fail to relieve the attendant symptoms of "worms," symptoms usually very irregular, and in some cases, severe in character. In many cases, though the irritation about the anus is relieved by injections, the irregularity of the bowels and the disturbance of sleep remain the same. This is probably due to the fact that the habitat of the worms is higher up in the large intestine where no remedy introduced by the rectum can reach them.

In many cases I have found that rhubarb in small doses brings away large numbers of worms, and at the same time regulates the bowels; so that the use of injections may in most cases be dispensed with. The formulæ which I have found most useful is as follows, varying slightly witn the age of the child:

℞ Tincturæ rhei, ♏ iij.
Magnesii carbonatis, gr. iij.
Tincturæ zingiberis, ♏ j.
Aquam, ad ℥ j.
M.

This is to be taken twice or three times daily, according to the effect on the bowels. Whether the rhubarb acts as a vermicide, or simply by "moving the worms on," I am unable to say.—*Pacific Record*, Feb. 15.

SPRIMON ON ANTIPYRIN IN MIGRAINE.—In the *Meditzinskoie Obzrenie*, No. 23, 1886, p. 1008, DR. VLADIMIR SPRIMON, of Borisoglebsk, writes that he uses antipyrin in all cases of hemicrania, and as a rule obtains excellent results. Given at the height of a fit, the drug only partially relieves pain, but does not shorten the duration of symptoms (especially when the patient remains on his legs all the while). But when administered during the period of prodromal phenomena, antipyrin almost invariably cuts short the paroxysm within an hour, and allows the patient to immediately resume his occupations. The dose required is one scruple. In delicate persons or those liable to giddiness, it is better to divide the dose in two parts and to give the second portion (if necessary) about half an hour after the first. In the *Centralbl für Klin. Med.*, No. 45, 1886, DR. UNGAR also states that antipyrin given in the dose of 1 to 1·5 gramme in the beginning of a paroxysm, acts better than any other ordinary symptomatic means used for the affection in question. In some cases, however, antipyrin (like salicylate of soda) remains inactive. PROFESSORS M. A. KHOMIAKOFF and I. M. LVOFF, of Kazan, were the first to recommend antipyrin as an excellent means for hemicrania, as well as for headache generally.—*London Medical Record.*

THE THERAPEUTIC APPLICATION OF SOLANIN.—Genenil, in the Rundschau (St. Peterb. Med. Wochenschr.), speaks very favorably of the action of solanin. He has used it in doses of 0.05—0.30 three or four times a day with good results in rheumatic and idiopathic neuralgia, sciatica, neuritis, prurigo, cystitis, hyperæsthesia, gastralgia, bronchitis, asthma, emphysematous dyspnœa and heart disease. He arrives at the following conclusions:

1. Solanin is a poison to the terminal end-plates of organic life; it narcotizes the medulla oblongata, spinal cord and nerve trunks, by which the terminations of the sensory and motor nerves are impaired, hence it is one of the best means for quieting pain. Large doses are not dangerous; it has no cumulative effect, and can replace morphine.

2. Solanin produces no congestion of the brain even in the aged, and can also be used in the treatment of children.

4. In all diseases associated with excitement, spasm and pain, solanin can certainly bring about great results.—*Weekly Med. Review*, Feb. 5.

BOLDO-GLUCINE IN NERVOUS INSOMNIA.—DR. RENE JURANVILLE has been studying the hypnotic action of a glucoside extracted from the leaves of the Chilian plant, boldo (*Pneumus boldus*). M. CHAPATEAUT, who discovered this body, has called it boldo-glucine. After trying experiments on dogs, which appeared to show that boldo-glucine was a safe hypnotic, producing a certain degree of cerebral anæmia, DR. JURANVILLE administered it per rectum or in capsules, in doses of 1.5 to 5 or even 8 grammes, to a number of patients suffering from different forms of insanity with insomnia. All the patients obtained sleep, or, at least, rest from excitement, and some were relieved from nocturnal hallucinations. Though the effect of the drug was, however, only temporary, the author believes it will prove useful in many cases of nervous insomnia, when other remedies have been unsuccessful.—*Brit. Med. Jour.*, Jan. 15.

BENZOIN RESIN IN ULCERS.—DR. WOSKRESENSKI, writing in the Russkaya Menitsina on the use of benzoin resin as a popular remedy for ulcers, says that he has frequently employed an ointment of the strength of four drachms to the ounce spread on lint, and renewed twice a day, with excellent results.

The Medical Age.

Vol. V. DETROIT, APRIL 25, 1887. No. 8.

Original Articles.

A PLEA FOR THE BETTER PREPARATION OF STUDENTS BEFORE ENTERING UPON THE STUDY OF MEDICINE.*

BY FRED. R BOYD, M. D., KALKASKA, MICH.

Although the efforts of one whose resources are so limited, and whose early training in thought and mental discipline were neglected as mine were, must come far short of what I could wish, yet I shall feel gratified and well rewarded, if I may be able to inspire in any degree a greater love for research, or encourage any stronger sense of the obligation which every medical man owes to so noble a profession as ours, in his selection and encouragement of young men who, with aspirations for professional studies and responsibilities, may come to him for counsel and advice. Perhaps it is this sense of inability, this recognition of a necessity on my part, which prompts me to this endeavor. Every honest physician who, by experience, knows something of what it is to struggle along slowly up through the grades of his study, without the assistance which a good college education can give, must feel something of this same necessity; and if he, from his narrow horizon, can so fully recognize the disadvantages under which he labors, how much more must the cultured and thoroughly-disciplined mind comprehend these disadvantages, and appreciate the beauties which are the results of early mental drill and patient toil embraced in a liberal preliminary course of study!

It is not my intention to decry all who have gone before, or those of the present, who may have failed to secure diplomas from literary colleges, or even all who have taken up the study and practice of medicine with scarcely any preparation. None of us but have seen examples of success, and even displays of genius, in men who have boldly launched out upon the profession with scarcely a district-school education; yet, I think we all will admit that these are exceptional cases, and, fortunately, possessed of traits not generally combined in human nature. There is force in the argument, that could these same men have had the advantage of thorough mental discipline in the earlier years of their lives, the success which crowned them might have been more grand and far-reaching in its results.

Our profession is truly a noble and inspiring one, and of all the so-called liberal professions, is, undoubtedly, the best calculated to call out and develop the many attributes of human nature. The demands upon the busy practitioner are great, indeed, and if these are truly and conscientiously met, the mind and heart of a great and noble nature are constantly brought into activity. We are not to take it for granted that because the laity, either learned or unlearned, fail to see and comprehend the magnitude of our professional responsibility, or because other professions assume greater dignity than ours, or wear a longer robe of righteousness, we have any excuse for idly folding our arms in rest and contentment, and with obtuse moral sensibilities, allow fortuitous circumstances to shape our own conduct or influence the growth of our profession. "There's a divinity that shapes our ends, rough hew them as we will," is an old saying which contains much of truth, but we must not construe it in our practice so as to give it a tinge of fatalism. The Creator, while he has wisely provided all things in nature and set them under the control of immutable law, has also endowed us with an intelligence akin to his own, and over our own natures has made us free moral agents. We thus become responsible just in proportion to our capabilities for doing good, and no doctrine of fatalism can possibly release us from the penalty following the infraction of law. Our intelligence points out the direction; our energy, muscle and nerve fiber, must convert its rough and rugged outline into a highway over which we may plod on to success.

We need go no farther than the medical profession to find men of activity, good judgment and good moral character, whose life-work has developed them into men of large hearts and sympathetic natures, and whose contact with society in all its many phases has taught them liberality and broadened them out as nothing else could do, as such experiences must do for all men who are not too narrow for development. This is all right in itself; this sort of experience may, and will do much in smoothing off the rough surfaces in any nature, but is it

*A paper read before the Northwestern Michigan Medical Association.

not true that these experiences frequently cost very much and are often obtained at the expense of tremendous sacrifices, involving the innocence of childhood, the strength of manhood and the weakness and infirmity of old age? The young practitioner may understand his technical work well, as far as the science of diagnosis and prescribing are concerned; he may even enjoy much apparent success, and yet be too narrow and circumscribed in his views to be worthy the work actually pressed upon him by necessity. In his hot, eager haste to get at the work for which he imagines the world is actually groaning every day, he has failed to grasp the situation, and, like an automaton, presses on, as he imagines, to the fulfillment of a latent prophesy concerning himself, for himself and of himself. I would not convey the idea that this is the case with any of the young men of our Association; indeed, my acquaintance with them leads me to a better conclusion, and I am proud to be able to acknowledge it; but is it not true that our present system of medical education, together with the looseness with which it is carried on, makes it easy for men without either education or character to press their way into an already crowded profession? Hundreds of those who step down from our institutions every year with their degrees, possess no stock-in-trade except their cheek and the roll of parchment for which they have paid their money, and it is a sad commentary upon both the physicians who signed their names as preceptors and the medical faculties who signed their diplomas.

The very attributes of our profession are the prime factors of its nobility, the citadel of its perfection, beauty and strength. In no other are the precepts and practices so calculated to touch and beautify every side of human nature, and in no other as in ours should its devotees be more widely awake to the necessity of holding up and raising higher its standard of requirements.

One has but to look over the constantly increasing number of graduates turned out upon the profession each spring, to recognize one of the prime reasons for advocating a higher standard. These numbers are such that the percentage of physicians is increasing much faster than it did before, and we may expect this ratio to go on increasing so long as our standard remains low.

The aspiration of any young man to pursue medicine is a laudable one, and on the part of many, very commendable; but, are we not safe in the assertion that far too great a number of these young men are entering upon a work involving responsibilities too great for their comprehension? Many of these have had scarcely any mental drill until they began the study of anatomy, and a larger percentage still never mastered a problem higher than those presented in the district school.

I am aware that the plea for a more liberal education is frequently opposed on the ground that young men are not made more practical by it; that many of those who were fortunate enough to receive such advantages as a thorough course can give, are men in whom philosophy, science and literature are laid away like beautiful volumes in a locked case—nice to look upon, but of no earthly use from a practical standpoint. I have no sympathy with this reasoning. To affirm that any practical young man will be made less so by months and years of drill in mastering the problems in Euclid, committing to memory the hundreds of pages from Sallust, Cicero, Xenophon or Herodotus, or poring over Cæsar and Virgil and Homer in translations from the original, is asserting that which is incompatible with reason, or even with good common sense, and is a menance to our future welfare as a profession.

For one to lay down a prescribed course, classical or scientific, as an absolute requirement for every medical student, would with the present existing sentiment be a measure ultra in the extreme and would be met on every side by opposition, and nowhere more vigorously than by many of the medical colleges themselves; and yet an advance step in this direction is being sounded along the line.

The organization of State Boards of Health such as the ones in Illinois, Pennsylvania, Virginia, etc., while bitterly criticised by loose medical schools and irregulars, are, nevertheless, the dawning of a brighter day for American medicine and are to be hailed as one step, at least, in advance.

It becomes apparent, then, that the time is ripe for reform. Too long have medical men remained silent upon a question involving immense interests. A spirit of reform begins to light up the East, and we await the full glory of a day of progress for our beloved profession. Can we await it in silence? Can we, as local practitioners of medicine, say to ourselves, it will come without the necessity of effort upon our part? Can we, the regular physicians of Northwestern Michigan afford to pursue our daily rounds with no other interest in this matter than to kindly wish it well and rest easy in the false hope that the entire process can and will be completed in our great medical centres? A negative answer is imperative: We cannot and we will not! Can we, with our present system of education, when medical colleges are multiplying all over our land, and young men everywhere are leaving the farm and other honorable and even lucrative occupations to join the already overflowing ranks of the profession, expect that much agitation is to come from the medical caters? I am sorry to say that the outlook is not a propitious one,

and who of us does not know that many of these institutions, under the guise of respectability, are carrying on a system of smuggling from year to year which must reflect dishonor upon an honorable and noble profession? This deplorable fact is only too apparent, and the result is we are not, as a profession, keeping pace with other callings and professions.

With the work now being done by the Chautauqua literary and scientific circles throughout our land, it will not be long till the farmers, mechanics and even their wives will be leading us in matters of general education, and, instead of the physician being the man of learning in the community, he must simply fall back and be content to yield the dignity of the position to others. We are all glad to live in an age of progress, to see all classes taking higher grounds. Nobody should be more enthusiastic over the education of the masses than the physician; but this very enthusiasm should prompt him to keep himself in the ascendancy. For the busy and often tired practitioner to do this, especially if he has never had the advantage of a college course, requires incessant toil. We cannot neglect our medical studies; the demands of the hour urge us to a proportionate amount of medical reading and research, which to neglect means nothing more or less than failure; this none of us can afford, but neither can we afford to let ourselves down below the level of the masses into whose society professional duty brings us into close and intimate relations every day.

It seems to me, then, that our present dilemma should be corrected as far as possible, not by a calm acceptance of what may seem to be the inevitable, without effort upon our part, but in a cool and collected manner we should lay down a line of study embracing such a knowledge of the collateral branches as shall by and by give us true intellectual strength, and cultivate and develop the habit of application and close and consecutive thought, and then, with a grand and brave "never-say-fail," buckle into the work and stand by our motto until success shall gloriously crown our efforts, in the meantime never forgetting to discourage any and every person from entering upon the study of medicine until they shall have attained the proper acquirements. I believe it to be the duty, as well as the privilege, of every true physician to honor the work of his own hands, to bestow grace and beauty upon his own progeny, and in no field can we more effectually adorn ourselves and our profession than by fully and conscientiously pointing out the right road to those who come seeking our own advice in regard to the choice of a life-work.

THE USE OF SULPHURETTED HYDROGEN IN PHTHISIS.

BY J. E. CLARK, M. D., PROFESSOR OF GENERAL CHEMISTRY, DETROIT COLLEGE OF MEDICINE.

As the result of a large number of experiments, CLAUDE-BERNARD announced, in 1857, the discovery of two therapeutic principles:

1st. That toxic materials introduced into the economy through an organ at a distance from the arterial blood-supply, could not penetrate into the general circulation *in toto*, because of its being eliminated before that system can be reached.

2d. Volatile substances are eliminated by the pulmonary alveoli.

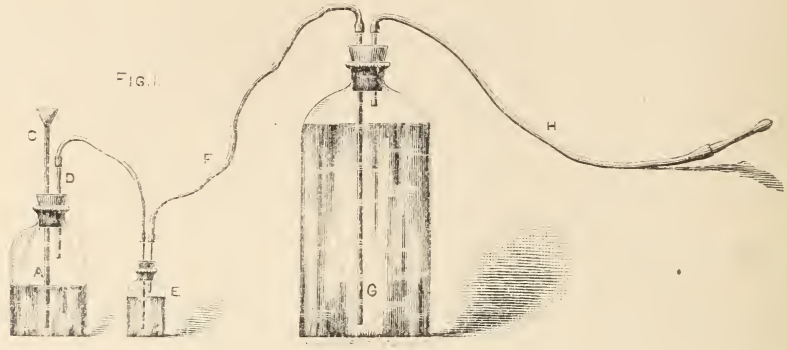
The practical and logical application of these two hypotheses to general therapeusis, and the important relation borne by them to medication, seems to have been almost entirely overlooked, or unappreciated until quite recently. True, various writers have on different occasions, incidentally and unconsciously advocated methods of treatment which were rational inferences from the above premises—but by their failure to recognize these relations they advised empirically, and missed enunciating any general law.

BENJAMIN BELL, in 1791, although he failed properly to appreciate, to its full extent, the fact, asserted that gases otherwise poisonous, could be supplied to the venous circulation by the rectum without causing poisonous effect, recommended tobacco smoke in large quantities "Thrown up in the form of injections as preferable to every other remedy for habitual constipation. For hernia and ileus it proves a very effectual anodyne."

Reasoning *a priori*, M. BERGEON (of Lyons) appears to have placed his new method of treatment of the respiratory organs and blood poisoning by gaseous enemata per rectum, on the basis of sound scientific principles, whatever the result may prove. Recognizing the premises enunciated by BERNARD, he permeates the whole body by gaseous substances in quantities otherwise poisonous, allowing them to be eliminated by the pulmonary alveoli, thus bringing more of the antiseptic or germicide in conjunction with the bacilli or their products, rendering them innocuous or at any rate preventing their further increase and development.

While it is not my province in this paper to investigate the results of treatment based on this theory, one cannot but admit that M. BERGEON gives a rational cause consistency to his advanced therapeutics, and so far as the published record of cases treated by this method goes, it is sufficiently flattering to warrant the physician in giving it his earnest consideration.

The treatment consists in injecting into the bowel a powerful gaseous germicide and antiseptic, preferably sulphuretted hydrogen H_2S, which exercises the therapeutic influence. By a long series of experiments M. BERGEON found it necessary to combine this gas with some diluent and finding carbonic anhydride CO_2 comes distended, but without pain, unless air is, from imperfect manipulation, injected with the gases. In this case, there are intestinal colics or tormina, atmospheric air being apparently an irritant. Within half an hour after ceasing the injection all gas is absorbed and expelled through the lungs and mouth,

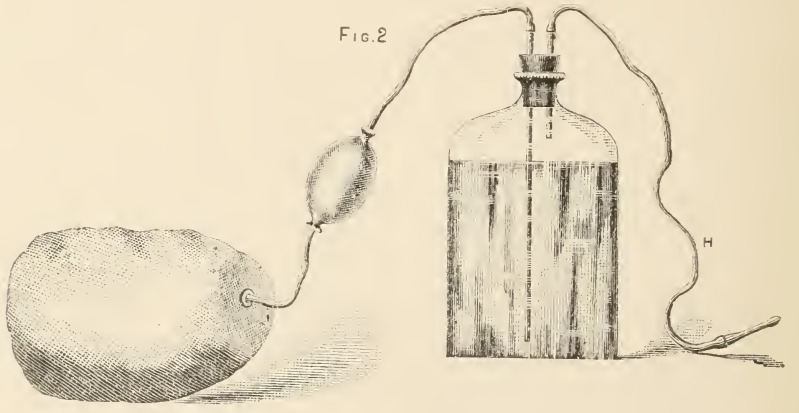


antiseptic, anæsthetic, (quieting cough) a supplemental food, (reducing oxidation and lower-temperature), and stimulating to the digestive organs, adopted it. The carbonic acid gas must be free from air (to prevent tormina), pure, and recently manufactured. The sulphuretted hydrogen preferred by M. BERGEON is procured from natural water, of which large quantities are easily obtained in this State, or it may be made as stated further on.

The injection is to be slowly and cautiously administered twice daily, an hour before or three hours after eating. At first about one quart (approximate) may be administered, gradually increased in the judgment of the physician to three or four times that amount.

"In two or three minutes, on applying the nose to the patient's mouth, the air emitted is found to be tainted by the sulphuretted gas. Twenty minutes is the time prescribed for the injection of four quarts. The abdomen becomes distended, but without pain, unless air is, from imperfect manipulation, injected with the gases. In this case, there are intestinal colics or tormina, atmospheric air being apparently an irritant. Within half an hour after ceasing the injection all gas is absorbed and expelled through the lungs and mouth, the abdomen regaining its usual shape and softness.

If natural sulphuretted hydrogen water, fresh from the spring, not having been exposed to the atmospherre be not convenient, two methods of preparing it may be selected. First by evolving it from antimony tri-sulphide and hydrochloric acid $Sb_2S_3 + 6HCl = 2SbCl_3 + 3H_2S$



—or by pouring dilute sulphuric acid upon ferrous sulphide $FeS + H_2SO_4 = FeSO_4 + H_2S$. The first method is preferable as evolving a purer sulphuretted hydrogen. The apparatus for manufacture is in either case the same.

Into the bottle (a, fig. 1) is introduced some of the iron or antimony which is covered with water and a snugly-fitting cork perforated with two holes for the glass tubing (c) and (d) introduced, (c) is pushed below the surface of the water and (d) slightly below the cork; it is then continued to the bottom of a tightly corked quinine bottle (e), half filled with water from which arises

above the water the glass and rubber tubing (f), which passes to the bottom of a half gallon bottle nearly filled with pure water. Dilute acid is then introduced into (a) through the funnel (c), the gas purified by passing through the wash bottle (e) saturating the water in (g). Five grains of chloride of sodium to the quart of water are then added. The point of saturation of the water in (g) can be ascertained by placing the hand tightly upon the mouth of the bottle and shaking. If pressure upon the hand exists continue the evolution of the gas.

Carbonic anhydride may be manufactured by the same apparatus by using sodium carbonate and dilute sulphuric acid. This, however, should be collected in a rubber bag from which the air is expelled by rolling it. A rubber ball compressor (Davison's syringe will do) is then connected with the bag and a tube passing to the bottom of the sulphuretted water bottle, Fig. 2, and a current of carbonic anhydride is forced through the sulphuretted water driving the gas off with it through a glass and rubber tube (h), the terminal extremity of which is introduced into the rectum. Where the manufacture of the sulphide is difficult for want of the necessary material it is recommended by some to simply pass the current of carbonic anhydride through a tube stopped at each end with cotton or perforated cork and containing a teaspoonful of bisulphide of carbon, CS_2. In the Philadelphia hospital the following solutions are used in the absence of the natural water:

℞ Strong sodii sulphid, gr. x.
Acid hydrochlor. dil., ♏xxx.
Aquæ, ℥ xxxij.

℞ Sodii sulphid.
Sodii chlor., ää gr. v.
Aquæ, ℥ xxxij.

In order to succeed with the treatment it is necessary to pursue properly the method of application, the chief difficulty to be avoided being the introduction of atmospheric air. Loose corks and bad points may be overcome by dropping melted paraffine upon the connections.

THE CONTAGIOUSNESS OF PHTHISIS.

BY ZINA PITCHER, M. D., DETROIT, MICH.

In the AGE of Nov. 26, 1886, there appeared a short article bearing upon the theory of the contagiousness of consumption. The writer stated that kittens that had licked the sputa of consumptives and chickens that had swallowed the same had exhibited symptoms of the dread disease, inasmuch as they gradually wasted away until death ensued. The article closed with a wish that practitioners investigate the matter and report results, believing that such a course would result in material benefit to those having the care of patients so afflicted. The appearance of the above gives me courage, even at this late date, to explode a theory I have entertained upon the subject for some time, and which had its origin during my residence among the natives of Southeastern Alaska. In order that one may fully understand the chain of circumstances that led up to it, it is necessary to go back to my advent in "the territory." I was struck within a short time, as is everyone, by the terrible ravages of the disease among these children of the Northwest. Very few are there, though apparently in prime condition physically, who do not exhibit indisputable symptoms of the trouble upon a close examination. Men, that to-day you see hunting and fishing, to-morrow come to you complaining of dyspnea, feeble heart-action and hemorrhage. As a rule, death comes to them comparatively early. But not as early as with the whites under similar circumstances, there being an entire absence of shock, which contributes not a little, generally, to the rapid decline of patients similarly afflicted in civilized lands. The native population is, and has been for some time, steadily decreasing. It is true that an epidemic of small-pox some years since contributed largely to that end, but not to such an extent that the ravages of consumption were lost sight of. The sudden onset of the more alarming symptoms may be in a measure explained by the almost universal prevalence entailed in the respiratory and circulatory organs in "packing" immense loads upon the back by means of a band passed across the chest horizontally, and attached to bands at either extremity, passing from the load, under the arms, in front of and over the shoulders, back to the load again. This, as a matter of course, renders breathing a difficult feat. The dampness of the climate, lack of good hygienic surroundings, intermarriage with Russians, existence of syphilis and scrofula, may explain the existence of the disease, but not its rapid spread and presence throughout whole families. One would expect to find among a people accustomed to a climate from infancy, taking plenty of out-door exercise, living extensively upon a diet of fats and oils, and remarkably free from gastric disturbances of any type, a certain percentage free from it, but such is not the case; it is the exception, rather than the rule, to find a man, woman or child free from it. After examining a large number of cases, young and old, it

struck me that some unusual agency must be at work, but look where I would, no remarkable explanation could be found, until I chanced to be in a house visiting a patient during the preparation of the evening meal. The klutchman (wife) was assiduously chewing a mass of something, spitting it, when thoroughly moistened, into a spider. Watching more closely, the substance chewed proved to be sea-weed, prepared in the fall by pressing into square cakes and drying. This she picked to pieces and thrust into her mouth masticating it as described. The spider at last becoming full a quantity of seal or herring oil was poured over it a few hot coals stirred in and later warmed slightly over a fire. Of this delicate dish the entire family partook briskly. This klutchman was a consumptive, and the patient (her son) was also suffering from the same complaint.

I learned that this manner of preparing the food was customary among those who still cling to the ancient customs and manners. A berry is prepared similarly with the exception that the siwash (man) does the masticating. After observing these families pursuing this disgusting custom and noting the percentage of cases, the families having partially and wholly adopted "Boston manners" were investigated and the percentage found materially less. It might be argued that better housed, better clad, it might not be expected. But on the other hand a complete change of habits, less exercise, and an absence of an extreme oil and fat diet under the same climatic influences would tend to tend to deteriorate rather than elevate the physical standard, for it is a fact borne out by practical illustration that Indians or others accustomed to an outdoor, roving life succumb in many instances to the disease when confined in our houses of correction and prisons although well housed well clad and fed, being allowed in addition regular exercise. If, then, animals and fowls succumb to the disease when the sputa of a bona fide consumption is introduced to the digestive organs, why can not the rapid spread of the trouble among these natives of the Northwest be accounted for in a like manner, the contagion being conveyed in the food masticated as described? It is expected objections enough will be found to this theory, but if it but invite discussion much good may come of it.

QUININE IN PARTURITION.

BY J. Z. SCOTT, SCANDIA, KANSAS.

For several years I have been in the habit of using the sulphate of quinine during the second stage of labor to regulate and increase the power of uterine contractions. In fact I use it to the exclusion of ergot. There has so much been said about the physiological effect of quinine on the gravid uterus, some claiming it caused contractions and others, whose opinions are considered authority, claiming that it had no such effect, that I feel rather modest in advancing any views. But one thing I am certain of, and that is that I have proven by experiment in my cases that quinine does have an effect on labor, and that is to prolong the contractions of the uterus, making them more rhythmical and lessening the danger of post-partum hemorrhage. Of course it is unnecessary to enter here into a long discussion as to the particular mode of operation by which quinine should have the above effect. All who read are more or less posted as to the physiological effects of quinine sulphate, and if the theory that one of its manifestations is to check the migration of white blood-corpuscles, and another that it can kill the infusoria in their lair, or, as PROF. BINZ, of Bonn, has said, that its action is acute enough so that in solutions of 1 part to 20,000 it will stop the oxidation process, or in other words, stops the ozonizing action of the blood, is it very hard to believe that it can have an equal effect upon the uterus? Quinine must have some selective effect on the unstriped muscular fiber of the coats of the arteries, and, as there is a vast amount of this kind of tissue congregated together in the uterus, why is this not the rationale for its effect there?

I believe it to be rational in theory, and I know it is successful in practice, that the salts of quinine have the action I have stated above on the pregnant uterus, and besides lessening the danger of septic inflammation and tending to make the prognosis of child-bed less anxious. I generally give a drachm of the drug, divided into twelve doses, three to be taken immediately after parturition, and the effect is always flattering.

Correspondence.

A SINGULAR CASE—WHAT IS IT?

MRS. J. L. J., aged 33, has during life suffered, to a more or less virulent extent, almost the entire catalogue of diseases peculiar to her sex. At the age of four years she received a blow which produced concussion of brain, and from which a small lump and some tenderness has ever since remained. She also received a hurt from a cow while in the act of milking, nearly two years since. This latter blow seriously sprained the neck, since which time, after holding the head in an inclined position for some time, as in reading or writing, it generally required the careful assistance of the hands to straighten the neck again. Has complained for past 10 or 15 days of considerable pain in the head and neck, but attributed it to action

of cold in the system and gave it no special attention.

Feb. 19, 1887. I was called at 2 P. M. Severe pains in the head. Great aversion to being moved. Pulse 46 and very feeble. Respiration 23 and also very feeble. Constantly changing position of head. Eyes wild and staring, with pupils somewhat contracted. Inclined to sleep or lie in semi-stupor, and moans constantly when in this condition, indicating great pain.

℞. Ext. gelsemii fl. gtt. ijss., potas. brom. gr. vj., in water solution, every two hours; also ext. piscidiæ eryth. fl. gtt. xx. every four hours, and salicylic acid and bismuth sub. nit. ää gr. ij. every four hours.

Feb. 20.—Pulse not discernible at wrist, and applying ear to heart region, only the faintest possible beat was perceptible, and it did not exceed 28 per minute. Respiration 12 and very feeble. Head drawn backward until the body described a half circle. Eyes staring more widely and pupils very much contracted. Continued semi-stupor, and talking and raving wildly. Frequent effort to void urine, which she can do only a few drops at a time, and says she is powerless to aid or force it in the least. Diagnosis: Cerebro-spinal meningitis.

℞. Ext. gelsemii fl. gtt. jv., potas. iodidi gr. v. M. Sig: Give in water every two hours; also ext. stigmata maidis and grindelia rob. fl., ää ʒ ss every two hours, and salicylic acid, carb. ammonia, ää gr. iij. every four hours. Strong mustard plaster to back of neck, and kept up continuously by moving up and down spine in different locations. Spts frumenti ad lib., not less than ʒ ss. every hour.

Feb. 21.—No favorable change perceptible, save that she voids urine freely and easily. Opisthotonos more marked. Pupils nearly undiscernible. Pulse, respiration and temperature unchanged. Discontinued stigmata and grindelia, exchanged mustard for fly blister, and applied from nape of neck down spine to the waist. Added to gelsemium and potas. bromide ext. nucis vomica fl. gtt. j., and found there had been no bowel action. Gave ext. rhamnus purshiana fl. ʒ ss. every four hours.

Feb. 22.—No perceptible change, not even bowel action. Discontinued gelsem. and potas. and gave instead ¼-gr. pills of phosphorus et nux vomica, three every four hours. Discontinued the cascara sagrada and gave hydrarg. sub. mur. gr. ij, and hydrastis canad. gr. ij every four hours.

Feb. 22.—Morning.—Condition unchanged. Pulse, respiration, temperature, eyes and position of body the same as on 21st. No bowel action since the 10th. Discontinued hydrarg. and hydrastis and gave enema of Castile soap and salt. Repeated every hour till free evacuation of bowels.

Following the second rectal injection there was a liberal discharge of hardened fæces, in appearance reminding me of Dutch Vienna wurst, of a generally dark color, but spotted at quite regular intervals with a grayish-yellow substance, resembling dried pus as much as anything I could liken it to. The whole discharge appeared as if kiln-dried, and was much harder than the sausage to which I have compared its general appearance. The third discharge, which occurred in about three hours, presented a normal appearance.

Four o'clock, P.M.—Heart action much improved, breathing much more full and frequent, the pupils gradually dilating, and the patient resting easy. Upon inquiry she informed me that she felt easy, only that the lower limbs, even to the toe-nails, prickled as though they were being brushed with nettles, and that was the first she had realized that she was composed of anything but head and neck since her taking sick. Discontinued all remedies but the pills, which were reduced to one instead of three.

Feb. 24.—Morning.—But little gain during the night; pulse 62, respiration 14, temperature 98½°, eyes little improved since last evening. Hope depressed. ℞ Phos. et nux vom. pills, two every four hours; salicylic acid, carb. ammon., ää gr. iij every four hours. Hot baths to lower limbs with heavy friction. Empl. cantharis to the spine.

Four o'clock P.M.—A marked change; much improved. Prickling sensation set up again, more violent than yesterday. Pulsation 64; respiration 16. Spine gradually relaxing and body straightening. Says she is going to get well, which she has persistently negatived previously. Asks for food and eats quite heartily.

Feb. 25.—Morning.—Pulsation, respiration, temperature and eyes normal. Complains only of a numbness or tingling sensation from neck down. Can get out of and into her bed without assistance. Can walk perfectly straight, but cannot stand on her feet on account of the numb feeling. Action of bowels and kidneys good. She is bright and cheerful and all indications point to speedy and complete recovery.

Feb. 28.—The patient has left her bed and is up through the house, cheerful and happy as ever, but somewhat weakened.

I neglected to mention a very livid rash that appeared thickly over the face and neck on the 21st, apparently under the epidermis, and the spots spread so rapidly that in twenty-four hours they involved well-nigh the whole surface, but quickly disappeared upon treating it to a friction bath of an emulsion composed of vaseline four parts, balsam peruvian., one part.

This is to me truly a strange case. I have not seen a parallel, nor can I find one by consulting our authors.

H. H. JOHNSON, M. D.

FOSTORIA, O.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., APR. 25, 1887.

Editorial.

MICHIGAN MEDICAL ACT.

We have received a copy of a medical bill which we learn has since passed the committee of the whole of the Michigan House of Representatives now in session, and stands an excellent chance of being enacted. Contrary to the experience of former bills this has, for some reason, received comparatively little attention from the profession of the State, and bids fair to become a law before the majority of those most directly affected by its provisions have been apprized of its existence. This would, to say the least, be unfortunate, and we present herewith a synopsis embodying the salient features:

The bill provides for the appointment by the Governor, within ten days after it shall have received his signature, of a Board of examiners, whose duty it shall be to examine all persons affected by its requirements, and to keep a register of the names and addresses of all practitioners of medicine in the State. This Board shall consist of an examiner, respectively, in anatomy, physiology, chemistry, surgery, obstetrics, regular medicine, homœopathic materia medica, homœopathic practice of medicine, eclectic materia medica, eclectic practice of medicine, and public medicine and hygiene. The examiners in anatomy, physiology, chemistry, surgery, obstetrics and regular practice, shall consist of regular physicians known to the Governor, by repute, to be especially efficient in those several branches. The examiners in homœopathic and eclectic materia medica and practice shall also be known by repute to be efficient in their several methods of practice. The Board shall organize by choosing from its number a president, a secretary, and a treasurer, and the records of its meetings shall at all times be open for public inspection. Its first meeting shal be held within thirty days after the enactment of the bill and its regular meetings thereafter shall be on the first Tuesday of January and July of each year. Special meetings may be held on the call of the president.

All persons who shall have been in practice in this State for ten years or longer preceding the organization of the Board shall on furnishing a sworn statement to that effect, receive from the secretary of the Board a certificate to that effect, which certificate shall constitute a license to practice. This statement is required of graduates and non-graduates alike, and graduates are required to state the colleges from which they obtained their degrees. The system of medicine which each practices shall also be stated. The penalty for misstatements by means of which the provisions of the act are sought to be evaded, is that the person guilty thereof shall on the presentation of reasonable proof of his guilt be subjected to an examination as to his qualifications. A successful examination will entitle him to a certificate, and should he persist in practicing in the event of an unsuccessful examination, the penalty is a fine of not less than fifty nor more than five hundred dollars, or imprisonment in the county jail for not less than thirty days. We presume, also, that the person could be proceeded against as provided by the statute for the crime of perjury.

The bill provides that no person, who in his statement declares himself as practicing a specialty, or as a practitioner according to an exclusive system, shall engage in more general practice or practice by any other system, without an examination in the additional branches or other sytem.

Any person desiring to commence the practice of medicine or surgery in this State on or after the organization of the aforesaid board shall, upon presenting evidence of a good moral character and a medical diploma from any school requiring as a condition of graduation, attendance upon two full lecture courses of at least six months each, and having a standard of examination recognized by the board as equal to that of the medical schools connected with that of the State university, and making affidavit that he or she is the person named in the diploma, and that he or she is lawfully possessed of the same, shall receive from the secretary of the board a certificate entitling him or her to practice medicine and surgery under the conditions imposed by the act. Such diploma may be presented to the board in person, by proxy or otherwise, and the affidavit may be taken by any person authorized to administer oaths, and the secretary of the board shall issue the certificate to such applicant, on the receipt of such diploma and affidavit, whether the same is presented in person or otherwise, and said secretary shall receive as a fee for all such certificates the sum of two dollars, which he shall pay into the treasury of the board.

All persons not having been engaged in the practice of medicine for a period of ten years prior to the passage of this act, who desire to practice regular medicine in this State, on or after the organization of the said Board, and who do not possess a diploma from some accredited regular school of medicine, shall appear personally and be examined by the examiners in anatomy, physiology, chemistry, surgery, obstetrics, regular practice and state medicine and hygiene, and on passing a satisfactory examination, the secretary shall grant a certificate for the same, which certificate shall entitle the holder to practice medicine and surgery in the State of Michigan, provided he shall pay the required fee, of two dollars, and be properly registered. In the case of homœopaths and eclectics the same conditions are imposed, they, however, being examined by the examiners of their respective schools or their special methods of practice.

No itinerant vendor of any drug or nostrum, who shall in any way profess to treat or prescribe for diseases or injury, shall be allowed to pursue his or her calling without having first undergone a satisfactory examination, as provided for all practitioners of medicine.

The revenues of the board shall be derived from fees, those from candidates for examination being five dollars and those from all qualified to practice without examination being two dollars. The per diem allowance for members of the Board shall be three dollars, and they shall be reimbursed for expenses.

A tolerably correct conception of the proposed bill may be formed from the above outline. How its provisions will affect practitioners who have not been in practice for ten years but who are legalized under the present medical Act, we are not prepared to say. For our part we are not in favor of the bill as a whole, inasmuch as it fails to deal with the question which, in our opinion, is the *fons et origo* of the evils which it is calculated to correct. It accepts the diplomas of medical colleges as a guarantee of the fitness of their possessors to practice medicine. Any medical Act which does this is worthless for the end which all Acts have ostensibly in view.

PRELIMINARY EDUCATION.

Dr. Fred R. Boyd's article in our present issue is calculated to call renewed attention to a subject the consideration of which each succeeding year makes more and more imperative. It is, moreover, very meet that it should be considered in this State now, in connection with the medical bill engaging the attention of the legislature. The demand of the times is not for more doctors, but for better, and it is useless to expect improvement in this direction until there is an improvement in the material out of which doctors are made. Some medical colleges defer to this view and make a show of exacting some literary qualifications on the part of their matriculates, but, in the majority of instances, those who have any familiarity with the internal workings of these institutions, know well that their pretensions are a hollow mockery. With rare exceptions lecture tickets, and diplomas alike, are like Hodge's razors—they are made to sell—and the instances in which the young man, practically regardless of his qualifications, who puts money in his purse is not able to purchase them, is a too infrequent phenomenon to vitiate the rule.

The profession is already overstocked, and the facility with which young men to whom manual labor has become irksome, may enter a profession, membership in which gives them standing in the community and enables them to earn more than they are able to at any other occupation for which they are fitted, is yearly adding to the overstock, while it is at the same time lowering the tone and dignity of a calling which was once a profession, but which is rapidly becoming a mere bread-and-butter business. The bill to which we have alluded, accepts a diploma as a guarantee of fitness, assuming that our colleges are a protection against the unfit material which seeks to be assimilated into the professional ranks. Dr. Boyd fitly remarks that "many of these institutions under the guise of respectability are carrying on a system of smuggling from year to year." The medical bill, therefore, which regards all diploma-bearing applicants for license to practice as entitled to the same, is a delusion and a snare as far as the best interests of the profession are concerned. We are personally acquainted with men who never attended a course of lectures and who are, notwithstanding, excellent practitioners. It is but proper that they should undergo a State examination, however; but to require such an examination of men who have supplemented a natural shrewdness with studious habits, keen powers of observation and years of experience, and allow the fledgling, hatched by the average "patent process" college, to go forth, unquestioned, to take upon himself the solemn responsibilities of the physician, is a piece of monstrous inconsistency.

The remedy for the evils which are afflicting our profession, and which are even menacing its existence as such, is in the hands of the profession. This fact is undisputed, but in spite of it those whom they most gall content themselves with scolding and fault-finding. Like the estimable gentlemen of the Northwestern Michigan Medical Association, who, doubtless, endorsed every word of Dr. Boyd's paper, they bemoan the condition of affairs which it portrays and hints at, but their action begins and ends in lamentation. This lamentation has

become tedious, and even such an admirable paper as that to which we refer, is chiefly tolerated because of the beauty and terseness of its diction. What is wanted is action. When will the profession take this matter in charge? A truce to further parley. What we want is some one who feels it his mission to exorcise the spirit of mammon which is degrading our medical colleges and working corresponding injury to the profession.

ACUTE BRONCHITIS IN CHILDREN.

A very timely and practical article on this subject is from the pen of DR. S. HENRY DESSAU, of New York, in the College and Clinical Record, for April. The author regards cold bathing as the best prophylactic of the affection, recommending at first sponging with cold water from the head to the shoulders and spinal column, to be followed later, as tolerance is established, by douches. With this we agree but in part. The cold douching of the infant is unnatural and injurious. We have too often seen the attempt to toughen the child in this manner, followed by the very difficulties it was intended to obviate. Judicious sponging is, however, to be commended. This, together with the necessary "air bath" during the process, will be found all that the delicate nervous organization of the infant can tolerate to good purpose. A proper regulation of the temperature of the living room is another important prophylactic, on which DR. DESSAU dwells. Unquestionably, the difference between the temperature of these rooms and that of out doors is a very fruitful cause of bronchitis. The general enervating effect of prolonged heat to say nothing of its effect on the integument, peculiarly predisposes the infant to inflammation of the mucous membranes as a direct result of sudden exposure to a lower temperature. The temperature of the apartment should never exceed 70°, and the respired air should not be vitiated with the products which load it in the absence of proper ventilation. While we would scarcely go to the length of classing acute bronchitis as a filth disease, the arguments which could be advanced in favor of such a proposition could be made very cogent. Cleanliness of body and of the respired air are among the most reliable prophylactics.

DR. DESSAU'S therapeutics of the affection will commend themselves to all who have had experience. When the inflammation is confined to the large tubes, when there is little or no rise of temperature he gives, to a child six months of age, one-fourth to one-half drop doses of wine of antimony in combination with one-half to one-drop doses of wine of ipecac every hour. Golden sulphuret of antimony, gr. 1-20, rubbed up with sugar of milk, and repeated hourly is also satisfactory. A stimulating embrocation, as of equal parts of oil of turpentine and olive oil, is a valuable adjuvant. In our practice we have found a solution of one grain of tartar emetic in a pint of water, and given *ad libitum*, excellent in these cases. This solution is tasteless and is particularly grateful when there is any fever, as there generally is even in the mildest cases.

In severe cases of bronchitis accompanied with an elevation of temperature, and where the medium-sized and smaller tubes are involved, DR. D. is in the habit of giving tincture of aconite root in doses of one-half to one drop, according to age, repeated every hour, with the result of reducing the temperature, and establishing resolution. If a spasmodic element of the cough is manifested to any extent, much benefit may be derived from the tincture of belladonna in drop doses, given alternately every hour with the aconite. It will be remembered that in the early stage of inflammation of a mucous membrane the secretion is at first diminished, the membrane becoming dry and swollen. Afterward. the secretion is increased in quantity, while at the same time it becomes altered in quality, being viscid and tenacious. Hence in the early stage of an acute bronchitis, where dry, subcrepitant or sonoro-sibilant râles are heard, the practice which is often followed, of giving stimulating expectorants, such as the carbonate and muriate of ammonia and squills, in free doses, can only result in aggravating the existing condition.

Much more successful results will be obtained by giving such remedies as will relieve congestion and swelling of the mucous membrane, through acting upon the force of pressure of the blood circulation, or by derivative action upon distant organs whose functions are in a measure compensatory in character. Such is the effect of aconite and veratrum viride. Nitrous ether, which is a depressor of arterial tension, as the other nitrites are known to be, which thus explains its diuretic effect, is a time-honored remedy in bronchitis, and may be cited as representing the latter class. Spirits of Mindererus, from its sudorific action upon the skin, is always indicated. A favorite combination of the author's, which has seldom failed to render him valuable service, is: Liq. ammon. acet., ʒiv; spts. ether. nit., syr. ipecac., ää ʒiss; syr. senegæ, ʒj; syr. limonis, fʒj. M. ʒj every three hours. This formula has been published in an incomplete form in JOHNSON'S Formulary of WOOD'S Library.

Hot poultices of flaxseed, sprinkled on the surface with mustard, made large enough to encircle the entire chest and covered with oil-silk, form an important addition to the treatment of the severer grades of bronchitis. Pieces of tape extending across the shoulders should be tacked to the cloth holding the

poultice, in front and behind, to prevent the poultice from slipping down. The effect of the heat and moisture, together with the counter-irritation produced by the mustard, which can be regulated in amount to suit the demands of the case, are unquestionably of the highest benefit. Where the bronchitis has extended to the infundibula and air vesicles, and catarrhal pneumonia has developed, the doctor has every reason to believe that a continuous mild counter-irritation, with the flaxseed poultice lightly sprinkled with mustard, has often been the principal means of enabling him to witness the successful termination of his cases. The poultice should be changed about three times during day and once through the night. Spongio-piline, wrung out with hot water, answers every purpose of the poultice, besides being cleaner and less troublesome to apply; but, being expensive, it can be afforded only by wealthy families. WEST recommends the spongio-piline to be srrinkled with a stimulating liniment, such as lin. camph. co., ℥ j; tr. canth., tr. opii, aa ʒ ij. M., when it is desired to produce counter-irritation.

When the râles have become soft and bubbling, and not disposed to clear up quickly, three to five drops of a saturated solution of muriate ammonia. given every two hours, have the happiest effect in clearing up the excessive secretion, notwithstanding in some cases evident signs of catarrhal pneumonia were present. It is important, especially in subjects of a scrofulous and rachitic diathesis, to establish a healthy condition of the mucous membrane of the bronchial tubes as soon as possible. In these cases there is a general tendency for some large ronchi to remain scattered over the lungs after the more severe symptoms have disappeared. The administration of tonics, as quinine and iodide of iron, together with cod-liver oil, is here clearly indicated, Counter-irritation to the back, in the interscapular space, with tincture of iodine, should be used, as it is also rightly regarded as a valuable means of promoting absorption of the enlarged bronchial glands.

DR. DESSAU fails to mention two remedies of vital importance in the treatment of cases in which the capillaries have become clogged with the products of inflammation, and in which suffocation seems imminent, the prolabia becoming cyanosed. Ordinarily the prognosis, when this condition supervenes, is very grave; n our experience, however, it is by no means absolutely hopeless, the remedies against it being assafœtida and the cold bath. Assafœtida is an excellent stimulant of respiration and the method of employing cold water advocated by DR. H. C. WOOD, of Philadelphia, in these extreme cases is a means of expelling the accumulated mucus the equal of which has not yet been advanced. This method, which we had occasion to resort to, a few days ago, in the case of an infant three months of age, is to quickly transfer the child from a warm bath to one of ice-water. The retention in the cold must, of course, be but momentary, the object being merely to cause the shock. The remedy may seem very heroic, and it may require no little courage on the part of the practitioner to suggest it, but in cases in which the infant is struggling for breath the contraction of the respiratory muscles which it causes will be followed by results which will remove all doubts as to the expediency of the procedure.

Notes.

It has been of old remarked that the owl wins in medicine. Why it is that this midnight prowler is thus successful, has until now, never been satisfactorily explained. In his address to the graduates of the Cincinnati College of Medicine and Surgery, PROF. M. L. AMICK ventures an explanation which has in it considerable ingenuity to commend it, and until something better is suggested it will, probably, stand: "We say to you, learn wisdom from the owl. Although he sits quietly during the day on one of the top-most branches of some sturdy old oak, yet who can tell but what he is pondering the mental example as to the number of chickens at the nearest farm-yard? He may be contending with that higher psychological problem as to the *probability* and the *possibility* of the result of his next visit. Again, he has learned from his ancestors that owls are very susceptible to lead-poisoning in the *day time*; hence, it is prudent not to take any desperate chances. The owl rests during the day time because the sun renders his eyes amblyopic, and he does not have good command of his accommodation and range of vision. He displays his wisdom and erudition by visiting the chicken department in the night, for wisdom and peace form a relative combination, and he does not wish to disturb the inhabitants of the neighborhood. In his philosophy he states that contention and strife belong to parliamentary and political bodies. He is not much of a debater, but a great reasoner. In his flights he may soar high, but he prefers darkness to light. His materializations are much more perfect after the shades of night have chased the sunbeams away. He is a veritable son of Nox. Finally, he figures that the fox or the weasel will get the credit for what he has done. After all, when the owl looks wise and innocent, and quietly says nothing, he may be plotting a tragedy that will require seven days and eight nights before the curtain will fall on the last act. Then we may learn this lesson from the owl: Even if we should not un-

derstand the subject that is placed before us, we can at least look wise and keep quiet."

DANIEL'S *Texas Medical Journal* tells the following true story of a Texas physician who makes a "snap diagnosis." "He was consulted by the wife of an influental citizen who said: 'Doctor, my baby is strangely affected, and I want you to tell me what's the matter. Whenever it goes to make water it seems to suffer great pain, and almost goes into convulsions.' 'Why, my dear madam,' replied the doctor, with the pompous and confident air of one who saw his opportunity for a brilliant hit, 'it is a clear case of elongated, and perhaps adherent prepuce.' 'Ah! indeed,' said the lady; 'and you are *sure*, doctor, that is what ails it?' 'Perfectly sure, madam, couldn't be mistaken: had thousands of such cases.' 'And what can you do to relieve it doctor?' 'Oh, simple enough, my dear madam,' said the doctor, 'I'll just remove the surplus preputial tissue, stitch the integument and mucous membrane back with a couple of antiseptic sutures, and the little fellow will be all right.' 'But,' said the lady, with a mischievous twinkle in her eye, 'doctor, my baby is a girl!' Exit the doctor who had a patient to see just about that time. Fact."

MARK TWAIN contributes to the Century a number of illustrative examples of a schoolmaster's failure to educate a pupil, from which we select a few with a medical bearing:

Physillogigy is to study about your bones, stummick, and vertebry. Occupations which are injurious to health are carbolic acid gas, which is impure blood. We have an upper and a lower skin. The lower skin moves all the time and the upper skin moves when we do. The body is mostly composed of water, and almost one-half is avaricious tissue. The chyle flows up the middle of the backbone and reaches the heart, where it meets the oxygen and is purified. The salivary glands are used to salivate the body. In the stomach starch is changed to cane sugar and cane sugar to sugar cane. The olfactory nerve enters the cavity of the orbit and is developed into the special sense of hearing. The growth of a tooth begins in the back of the mouth and extens to the stomach.

The Detroit Board of Health is experiencing some difficulty in securing a successor to DR. O. W. WIGHT, Health Officer, who has resigned the position. The salary is $3,000 a year, but the conditions of the office are that the incumbent shall devote to it his entire time, and that he shall be a Democrat. The Board of Health is preponderatingly Democratic in its complexion, and it has gone forth that none but a Democratic doctor need apply.

While there are doubtless, competent men in the Democratic party who would take the position at the salary fixed, could they be assured of its permanency, there are few of such who would feel like surrendering their practices to place themselves under the domination of a coterie who regard a man's political opinions in making their selection of an incumbent for a position of this nature.

"Show me the man who has indulged in the use of tobacco, and stimulants even moderately, from his fifteenth to his fiftieth year of age, and I will show you a man who frequently complains of being exhausted while he is attending to his business; he will also complain of other mental troubles and will require long vacations.'. This declaration has been dignified by finding place in a number of our contemporaries recently. The statement implies that he who does not smoke, neither drinks, does not "frequently complain of being exhausted while attending to his business." Show us the man who uttered it and we will show you a member of a numerous class who in defense of preconceived opinions obstinately shut their eyes to facts.

According to a decision of the Supreme Court of Illinois, it is not a trivial matter to take a newspaper and refuse to pay for it. A publisher in that State recently brought suit against forty-three men who would not pay their subscriptions, and obtained judgment in each for the full amount of the claim. Of these, twenty-eight men made affidavit that they owned no more property than the law allowed them, thus preventing attachments. Then they, under the decision of the Supreme Court, were arrested for petty larceny, and bound over in the sum of $300 each. All but six gave bonds, while six went to jail. The postal law makes it larceny to take a newspaper and refuse to pay for it.

DR. MURRELL, of London, who is widely known through his little work "What to do in Cases of Poisoning," is apparently not flattered by the fact that such an unpretentious little book has brought him more fame than others of his literary efforts. He says in a preface to the last edition: This work has reached a fifth edition, but it is not my fault, and I disclaim all responsibility in the matter. I am told that it has been the means of saving many lives, and I have no doubt this is true, for I hear that a gentleman who thought of poisoning himself changed his mind on reading the directions for treatment."

Medical News: One of our own guild, SIR THOMAS BROWNE, has said: "There are not

only diseases incurable in physick, but cases indissolvable in law, vices incorrigible in divinity." He further states in regard to charging the uncured patient: "Where I do him no good, methinks it is scarce honest gain, though I confess 'tis but the worthy salary of our well-intended endeavors." The last clause furnishes the ethical rule which should govern the physician in collecting his bill, even though his services have been in vain.

The deaths in Detroit during the month of March, ult., were 303, or (the population being 180,000) 19.81 per thousand. Of these twelve were from diphtheria, twenty-six of scarlatina, thirty-six of phthisis pulmonalis, ten of tabes mesenterica, twenty-four of convulsions, ten of valvular disease of the heart, twenty-one of bronchitis, twenty-nine of pneumonia, and twenty-four still births. The mortality from valvular disease of the heart is something very remarkable.

Dr. Eugene Smith, of this city, who but lately returned from an extended visit to the European medical centres, left again for the same scenes on the 16th inst. His object is to continue his studies of certain ophthalmological problems, under De Wecker, of Paris, more especially the antiseptic operations for cataract, which he was unable to complete on his last visit owing to the absence of the great Parisian. Mrs. Smith again accompanies him.

Dr. Shrady, of the *Medical Record*, has been making confession to a New York Tribune man. In his youth, when he was sent to prayer-meeting it was his custom to go to the Bowery theatre instead. This confession contains a warning to the youth of our day. It would be interesting to know to what early misconduct the other medical editors owe their present misfortunes.

Following the ceremony of conferring degrees by the dean of one of the St. Louis medical colleges, the band enlivened the audience by giving the tune of "Strike the Lyre." We will anticipate any remarks which may be suggested by the coincidence, by stating that the dean suffered no personal violence.

The Western Druggist says that measly patients smell like pickled geese. This is important, and if the olfactories of physicians shall confirm its truth, our pharmaceutical contemporary will receive credit for the discovery.

One who knows says a physician's work fills six feet of ground, but a dentist's fills an acher.

Therapeutic Brevities.

Peroxide of Hydrogen in Whooping-Cough.—Dr. Benjamin Ward Richardson, states that he has treated nine cases of whooping-cough with peroxide of hydrogen exclusively, in six males and three females, all children. The solution was given in doses of a fluid-drachm five or six times a day. The remedy in this affection has a decided value. Commencing with it in the acute stages of the disease, and trusting to it alone, he has never seen pertussis cut short so quickly and determinately by any mode of treatment except change of air. He had previously used dilute nitric acid in whooping-cough, as advised by the late Dr. Gibb, and with satisfactory results. The peroxide appears to him to act in a manner very similar, but, he thinks, with more effect. It subdues the spasmodic paroxysm, checks the secretion in the throat, and shortens the period of the malady, lessening, thereby, the dangers of after-effects. The mode of prescribing it is:

Hydrogen peroxide (10 vols. strength), ʒ vj.
Glycerin pure, ʒ iv.
Water distilled to ʒ iij. ℿ.

To make a solution of three fluid ounces, of which let half a fluid-ounce be taken in a wine-glassful of water as directed.

When there is a stridulous spasm with the cough he substitutes ozonic ether ʒ ij for the solution of the peroxide, or adds it to the mixture.—*The Asclepiad*, No. 13, 1887.

Painful Menstruation.—Dr. A. A. Fefe writes to the Med. and Surg. Reporter: Having found the following formula a good one in cases of amenorrhœa and dysmenorrhœa, I send it for publication, thinking perhaps some of your readers might be seeking for something of the kind. It is not a specific, but the nearest approach to it of anything I ever found for the above-named difficulties:

℞ Fl. ext. cimicifuga, ʒ ss.
Fl. ext. pulsatilla, ʒ jss.
M. Flavor to disguise taste.
Sig.—One teaspoonful every one or two hours to six does, unless flow is sooner established.

To disguise the taste, I ordinarily add the following:

℞ Fl. ext. yerba santa, ʒ j.
Syrup simp., ad., ʒ iv.

I find the recipe of most use in women of a nervous temperament. Of course, if there is any self-evident cause for the menstrual trouble, that should be removed; but we often find the trouble existing in young girls in whom the

flow is perfectly established, and who will not consent to an examination.

OINTMENTS FROM THE FORMULARY OF THE NEW YORK HOSPITALS.—The following is prescribed by DR. W. F. MITTENDORF in recent burns and injuries of the eye; it should be applied every hour:

℞ Cocaini hydrochloratis, gr. 2.
Petrolati, gr. 40.
M.

Petrolatum is commonly known as petroleum ointment, paraffin jelly, or vaseline. Also,

℞ Iodoformi, gr. 30.
Atropinæ sulphatis, gr. j.
Petrolati, ʒ ½.
M.

To be applied to the conjunctiva every evening in chronic phlyctenular ulcers.

The following is the formulæ for Hebra's (or Wilkinson's) compound sulphur ointment:

℞ Calcii carbonat. præcip.,	2	parts.
Sulphuris sublimat.,	3	"
Olei cadini,	3	"
Saponis viridis,	6	"
Adipis,	6	"

Melt the lard at gentle heat. Then add the green soap and incorporate the other ingredients, stirring until the ointment is cold.

THE USE OF MENTHOL.—The following semi-fluid will be found useful when it is desirable to apply menthol to the mucous membranes—a camel's-hair brush is the most convenient agent for its application:

℞ Mentholi, grs. 15.
Dissolve in ol. olivarum, ♏ 45,
and add
Lanolini, ʒ 1½.
M. f. unguent.

In burns, the following is an excellent application:

℞ Mentholi, grs. 75.
Ol. olivarum, ʒ 11½.
Aquæ calcariæ, ʒ 11½.
M. f. linimentum.

This preparation may be spread as a plaster, and as such may be most conveniently applied.

COCA AS A CARDIAC TONIC.—The New York Medical Record of February 26th, 1887, gives an interesting article entitled "Heart Strain and Weak Heart," by BEVERLEY ROBINSON, M. D. We extract the following (p. 238).

* * * "On several occasions, when digitalis has proved to be useless or injurious, I have had very excellent results from caffeine or convallaria. Certainly, the latter drug is more easily tolerated by a sensitive stomach than digitalis is, and whenever the nervous supply of the heart is especially implicated, I believe that I secure more quieting effects from its employment. Among well-known cardiac tonics and stimulants for obtaining temporary good effects, at least, I know of no drug quite equal to coca. Given in the form of wine or fluid extract, it does much, at times, to restore the heart-muscle to its former tone. I have obtained the best effects from the use of Mariani's wine. From personal information given me by this reliable pharmacist, these results are attributable to the excellent quality of the coca leaves and of the wine which he uses in its manufacture."

A NEW COLLODION.—The *Journal de Médecine* publishes a notice on a new collodion which is antiseptic and facilitates cicatrization. This collodion does not cause inflammation, and may be substituted for collodion containing gun-cotton in treating wounds and bruises. Like traumatacene, it is efficacious in neuralgic pains, acute or chronic rheumatism. The affected parts should be sponged with it every twenty-four hours, and in serious cases every six hours. If strips of linen or silk be soaked with this collodion an excellent plaster is obtained, which equals that prepared with ichthyocolla, commonly called English court-plaster. It is prepared according to the following formula: Mastic in globules, 3 grammes; balsam of Peru, 1 gramme; narcotin, 1 gramme. Each substance is separately ground; 5 grammes of chloroform are added. The mixture is shaken from time to time, and allowed to rest after solution.

A CURE FOR COLDS.—DR. J. H. WHELAN recommends the following pill as well-nigh specific in the case of a cold:

℞ Quininæ sulphatis, gr. xviij.
Liquoris arsenicalis, ♏ xii.
Liquoris atropinæ, ♏ j.
Extracti gentianæ, gr. xx.
Pulv. gummi acaciæ, q. s.
M Div. in pil. no xij.

Sig. Take one every three four or six hours, according to circumstances.

DR. WHELAN has tried, but to find futile, all the remedies usually administered for "cold," and now employs the above pill exclusively. The longest time required, in his experience, to break up a cold with these pills was three days.

BINIODIDE OF MERCURY AS AN EMMENAGOGUE.—DR. C. R. ILLINGWORTH writes, in the Lancet, that the red iodide of mercury is a certain and safe emmenagogue. He prescribes it as follows:

℞ Sol. cor. sub. (gr. ss to ʒ j), ʒ j.
Potass. iodid., ʒ ss.
Ferri ammon. citrat, ʒ j.
Ether. chlorici, ʒ ij.
Aquam, ad ℥ viij.

Sig.—A tablespoonful three times a day after meals.

NEPHRITIC COLIC, TREATMENT.—HUCHARD (Les Nouveaux Rhemedies) recommends the following:

℞ Sodii benzoat.,
Lithii carbonat.,
Ext. stigmat. maydis, ää gr. xlv.
Ol. anisi, gtt. iij.

Divide into sixty pills. Sig. Four pills daily. —*Med. News.*

CREASOTE IN CHOLERA MORBUS —

℞ Spir. chloroform,
Tinct. opii,
Sp. camphoræ, ää f ʒ iss.
Creasot., gtt. iij.
Olei cinnam., gtt. vii.
Sp. vini gallici, f ʒ ii.

M. Sig.—Ten to twenty drops every five minutes.—*Med. Record.*

FOR INFANT DIARRHŒA.—

℞ Oxide of zinc. gr. viij.
Sub. nitrate bismuth, ʒ j.
Fl. ext. dewberry root, ʒ ij.
Syr. acaciæ, ad ℥ ij.

M. Sig.—A teaspoonful every three hours.—*Sim.*

ANODYNE FOR DENTAL CARIES.—DR. K. GSELL-FELS (St. Petersburg Med. Woch.) recommends the following mixture:

℞ Rasped camphor, 5 parts.
Chloral hydrate, 5 parts.
Cocaine hydrochlor., 1 part.

On heating the mixture to the boiling point of water, an oily liquid is formed.—*N. E. Med. Monthly.*

FOR FETID BRONCHITIS.—

℞ Ol. terebinthinæ, ʒ ij.
Ol. menthæ pip., ʒ ss.
Tinct. belladonnæ, ʒ ss.
Mucil. acaciæ, ℥ j.
Syr. simp., ℥ j.

M. Sig.—Teaspoonful every three hours.

FOR DENTAL NEURALGIA AND HEADACHE OF PREGNANCY.—

℞ Ferri pyrophos., gr. xl.
Sp. ammon. arom., f ʒ ij.
Acid. citrici., gr. xx.
Syrupi, f ʒ vi.
Aquam dest. q. s ad f ℥ iv.

M. Sig.—f ℥ ss three times a day.—WELLFORD, in *Practice.*

CHRONIC PHARYNGITIS.—

℞ Acidi tannici, ʒ j.
Tinct. benzoini comp., ʒ ss.
Aquæ rosæ, ℥ vj.

M. Sig.—Use as a gargle twice daily.

CHORDEE.—

℞ Morphinæ sulphatis, gr. iss.
Ext. hyoscyami, gr. j.
Ol. theobromæ, q. s.

M. Ft. suppos. no. vi.
Sig.—Use at bedtime.

CARDIAC ASTHMA.—

℞ Tinct. belladonnæ, ♏xxiv.
Tinct. veratri viridi, ♏xx.
Morphinæ sulphatis, gr. j.
Syr. simp., ʒ ij.

M. Sig.—Teaspoonful after meals.

DYSENTERY.—

℞ Tinct. opii deod., ʒ iss.
Tinct. cannabis indicæ, ʒ iij.
Tinct. capsici, ʒ ss.
Tinct. eucalypti, ʒ iss.

M. Sig.—Teaspoonful every four hours.

GOUT.—

℞ Vini colchici rad., ʒ ss.
Tinct. digitalis, ʒ ij.
Liq. potassii citratis, ʒ iiss.

M. Sig.—Teaspoonful in water four times a day.

FEVER MIXTURE.—

℞ Ext. aconiti rad., ♏xij.
Spts. ammonii aromat., ʒ ij.
Syr. limonis, ʒ iij.

M. Sig.—Teaspoonful every two hours.

MENORRHAGIA.—

℞ Ext. hamamelis, f ʒ j.
Ext. gossypii rad., f ʒ j.
Elix. simp., ʒ j.

M. Sig.—Teaspoonful every three hours.

Medical Progress.

OIL OF TURPENTINE IN CHRONIC CATARRHAL AFFECTIONS.*—What I may say on the subject of terebinthinates can present no claim to originality, for "Pliny describes several varieties of turpentine, and speaks of their use for coughs and ulcerated bowels." (Stille's Therapeutics"), and "Boerhave and others in the last century recommended the oil for chronic affections of the lungs and bowels." (Ibid.) JOHN HUNTER advises it in hemorrhages, stating: "I have seen it immediately stop vomiting of blood from the stomach after all other means had failed;" adding, "it is the best if not the only true styptic." In 1826, DR. GEORGE B. WOOD drew attention to its use in certain conditions of fevers marked with dryness of the tongue, tenderness, and slight distension of the abdomen, a frequent and feeble pulse, wandering intellect, and an anxious expression of countenance, which his own subsequent experience and that of numbers of others have abundantly verified. Stillé, in commenting upon this, states: "Its mode of action appears to be, locally, that, of a healthy excitant of the intestinal ulcers, promoting their cure; and at the same time that of a genial stimulant of the whole economy." CHAPMAN, in his therapeutics, refers to its use in certain intestinal fluxes, and asserts that in chronic diarrhœa, where the discharges are such as to denote the mucous coat of the intestines to be chiefly affected, it is an incomparable remedy." But in spite of these historical facts, it is no less true that our text-books of to-day give but slighting testimony to its efficacy, and many of them ignore its usefulness in catarrhal conditions.

Turpentine taken internally is capable of impressing almost the entire mucous surface of the body. The exceptions are the uterus and vagina. It directly impresses that of the entire gastro-intestinal tract before absorption, and being eliminated by the renal and pulmonary tissues, reaches the mucous surfaces of the tracts communicating therewith. Such an agent, possessing decided powers of impressing tissues with which it comes in contact, must possess marked therapeutic value. Add to this its known powers as a *general stimulant* through the blood to the various tissues with which it is brought into contact, during its transit from entrance to exit, and we have its field of usefulness infinitely extended.

It is not to my purpose, on this occasion, to call attention to *all* it is capable of doing, but to limit the observations to its usefulness in the chronic catarrhal affections of the alimentary tract and the lungs. In hemorrhages from these surfaces it possesses peculiar powers. This is especially true of the stomach, in ulcers of whose mucous coat it stands pre-eminent. Here it can be brought in contact with the diseased and bleeding surface most directly, and in concentrated form. In hemorrhage of the intestines it is only a little less valuable, and even here it ranks with any other styptic, and outranks most of them. This is as true of the hemorrhages of the engorged mucous membrane in the earlier days of typhoid fever as of the hemorrhages from the ulcers at a later period. In the latter instance aids, such as opium, are indispensable of course; but the direct styptic action of turpentine is unquestionable. But these are matters of everyday experience.

In the subacute and chronic diarrhœas, which are more or less prevalent in our variable climate, the remedy is used to a much less extent than its efficacy deserves. During the past few years my confidence in its value has been abundantly and increasingly stimulated in a somewhat extended experience in hospital and private work. I will cite an instance, as illustration, of a young woman who for several months had been tormented with a diarrhœa which persisted in spite of bismuth, opium, nitrate of silver, sulphate of copper, the mineral acids, and other well known agents, used singly or some of them combined, together with abstemious attention to a suitable diet. The diarrhœa would sometimes be checked, only to return with the cessation of the remedy. Oil of turpentine induced almost immediate relief, which was permanent. The diarrhœa, in this case, was of the nature of a "lientery." This is but one of a large number of similar experiences which I could detail more or less fully, did time permit, so that I have come to look upon the remedy as an incomparable one in cases of chronic diarrhœa where the mucous membrane over an extended tract is involved, in chronic inflammation.

In these cases bismuth is not so serviceable as in acute disease. Indeed, I reckon the value of bismuth in catarrhal diseases of the intestinal tract as great in the *acute* stages, but rapidly growing less in the *subacute* and *chronic* cases, its value being in inverse proportion to the chronicity; and in real chronic cases its mechanical presence, instead of being an *aid* to *reparative changes* seems to aid in keeping up the *irritation*. Opium in these cases, by lessening peristalsis, will arrest the diarrhœa, only to be followed on its cessation with an aggravation of the trouble. Lead and silver salts unquestionably serve to arrest the catarrhal conditions, and tend to repair the tissue; but how little their influence must be in the small quantities which can be safely administered, and the extensive surface upon which they must distribute their influence to be of any avail. Besides, in most of these cases the diseased areas are more or less protected from the influence of such agents as these by a tenacious environment of mucus. Here, it is true, the mineral acids have proven of inestimable value. But even when they have failed, as in the above instance, the turpentine has, in my hands, acted promptly and efficiently. The quantity taken in these cases can be considerable without fear of irritation, and the volatile nature of the agent enables it to diffuse itself throughout the bowel, into all the interstices thereof, and to permeate even the mucous environment of the diseased glands, and directly impress these structures.

The best time for its administration in these cases is between meals and at bed-time. If, however, taken on an empty stomach its regurgitation is decided, it should be administered about an hour after a meal.

Another class of affections, equally favorably influenced by turpentine, is that associated

*Read before the Philadelphia Clinical Society.

with chronic bronchitis. Ammonia salts from their influence on the respiratory act and on the respiratory tract have, in a great degree, crowded the terebinthinates to the wall. This is not as it should be. Both classes have their value; both have great value, but each has its own peculiar value. In proportion to chronicity of bronchial catarrh, ammonia becomes of *less*, and turpentine of *more* value. This is simply the conclusion to which my experience has brought me. It may not agree with that of others: it may not be correct; but it seems to me to be justified by my own experience.

One of the earliest experiences I had with turpentine, in this class of cases, was in the case of a young man of slight build, about 21, who, during the exhausting latter days of an attack of typhoid fever, in which there had been more than the ordinary slight bronchitis with which almost all cases are characterized, developed a disseminated catarrh which involved the alveoli of one of the lungs, and developed numerous foci of catarrhal pneumonia. I had been watching the case for some time, as a consultant, and on the development of this condition advised the use of turpentine as the most desirable stimulant. One of our most eminent authorities was called to our aid after a few days, who verified the diagnosis, gave a very unfavorable prognosis, and sanctioned the use of the turpentine. Under its use convalescence was established, the lung entirely cleared, and the patient still remains well, and has since taken out a life insurance policy, after a rigid examination. Since then I have used this drug with increasing confidence, not only in catarrhal conditions, secondary to acute disease, but in primary catarrhal diseases, which linger and threaten to involve the alveoli, or which have already involved the alveoli, and become entitled to classification as incipient phthisis. In the dry forms the drug has not seemed desirable, but in the form characterized with decided or abundant expectoration its best effects are obtained. It is, of course, not a panacea. Many of these cases, despite its administration, go on from bad to worse, but in enough of them are beneficial results obtained to make me value the remedy as among the best.

Two other instances in which I have used the drug are as follow:

Case 1. Mrs. G., aged thirty-four, had a good constitution with no phthiscal tendency. Early last winter she developed a bronchial catarrh, which she allowed to run on for six weeks without giving it any attention. Upon examination, I found diminished respiratory power over the entire right side; fine moist râles throughout, most marked in the axillary and infra-axillary regions; limited pleuritic friction sounds in infra-axillary region; prolonged expiration, especially at the apex, and impaired resonance. Flesh and strength were rapidly lost, and the case threatened to be one of rapid phthisis; there were frequent chills, afternoon fever, and decided night-sweats. The main stimulant was turpentine, in pearls, m̄v. after each meal and at bed-time. This remedy would be kept up for three or four weeks, then discontinued for a week, giving muriate or carbonate of ammonium instead. As the cough was worse on lying down, inhalations of chloroform were used to insure sleep. By the time summer commenced, the patient's condition was much improved. There is remaining a slight crepitus over the pleuritic spot, but the lung is now as clear as it ever was, and the patient has regained her normal flesh and strength.

Case 2. Was a clerk in the office of the Pennsylvania railroad. One evening he had some spitting of blood, and on examination I found a pneumonic condition of the upper lobe of the right lung; there was not much solidification, but the respiratory force was much impaired. The patient was sent to the country for three months, during which time the lung cleared up nicely, turpentine being the one remedy.

Its method of administration may be varied. It may be given as terebene, oil of turpentine, or tar dropped into a pitcher of boiling water, and the vapors inhaled through a paper funnel —a method which is of advantage in the cases where the larynx and trachea are chiefly affected. Here, also, one of the many forms of oro-nasal inhalers may be used for the administration of terebene, oil of turpentine, etc. But where the smaller bronchi are invaded, inhalations are of doubtful local service, little, if any, of the remedy reaching the part. The internal administration is here indicated. The oil may be given in capsule, gelatine capsules being prepared by the dispensing druggist; or the more elegant French pearls may be substituted, containing ten or five drops of the remedy, and one or two of these given an hour after eating. In this form the drug is not tasted, unless regurgitated, and if taken an hour after meals will be so quickly passed into the intestine as to interfere but little, if any, with gastric digestion. In intestinal catarrh it may be administered in capsule also, or if the patient is unable to swallow the pearls or capsules, an emulsion may be made, and the acrimonious taste of the turpentine may be entirely concealed by adding a small quantity of oil of anise seed, whose influence is adjuvant to the turpentine in the diseased conditions. In bronchial catarrh, where the ammonia salt seems also desirable, a combination like this may be used with advantage, and is quite a favorite of mine in cutting off harrassing bronchial catarrhs, which persist in remaining:

℞ Ammon. chloridi, ʒ iss.
Vini picis liquid., ℥ ss.
Syr. tolutani, f ℥ j.
Aquæ, f ℥ ijss.
M. Sig.—Dessertspoonful every four hours.

But when catarrh involves the alveoli, I much prefer the turpentine itself.

If I have seemed to make too much out of a very small matter, I hope to be excused. My desire was two-fold: first, to call attention to a valuable aid in combating forms of disease only too prevalent in our climate; and secondly, to my experience confirmed, or corrected, by that of my fellows. On the value of the drug in certain catarrhal affections of the genito-urinary organs, I prefer to be silent at present, both for want of time and of sufficient experience to be of much value.—J. B. Walker, M. D., in *Med. and Surg. Reporter*, Jan. 8.

A New Method of Treating Chronic Aural Catarrh.—While engaged in the study of the pathology of naso-aural catarrh, during November and December, 1885, my attention was particularly drawn to the persistency of certain conditions of the pharyngeal mouth of the Eustachian tubes, as important factors in the general disease. Three principal forms of inflammatory disease of the tubes were noted: 1st. A condition of turgescence and inflammatory infiltration, the tubal lips appearing red and swollen, and secretion from the tubal glands being very active; the nasal pathological condition in these cases was hypertrophic catarrh in the stage of chronic venous distention with infiltration. 2d. The condition here noted accompanied advanced hypertrophic nasal catarrrh, the turbinated bodies being largely converted into fibrous tissue. The prominence at the mouth of the tube was here found to be hypertrophied, the color was a dull reddish-yellow on the inferior and bright-red on the superior surface. The pharyngeal tonsil was found to be enlarged, and the posterior nares more or less blocked with posterior hypertrophies. In these cases the mouth of the tube was frequently found completely filled with tenacious mucus. 3d. The third condition noted accompanied atrophic rhinitis, and here the lips of the tube were shrunken, the mucous membrane undergoing sclerosis, and the tubal mouth was often blocked by dried crusts.

It was found that after prolonged treatment of the nasal affection had partially or wholly cured the intra-nasal disease, that although the inflammatory conditions present in the Eustachian tubes might be improved, they were rarely if ever cured, the disease persisting in the last half inch of the tube.

Applications made directly to the tubal mouth with the post-nasal applicator or atomizer also gave but slightly better results. Various methods of treatment were tried without avail; the older methods of injecting solutions through the ordinary Eustachian catheter into the canal and middle ear were not tried, the evil effects of these applications in causing acute otitis media and severe inflammation high up in the tube being now well demonstrated.

With the object of making applications to the tube alone without danger of the fluid being forced into the middle ear or high up in the tube, I have devised the following instrument. It consists of an Eustachian catheter closed at the point, and having the sides of the curved portion perforated with numerous very minute openings. A small syringe is fitted with a metallic nozzle fitting on the ground-joint principle into the end of the catheter. The instrument may be made of German silver, but is better made of pure silver. The best average diameter is that of an ordinary Eustachian catheter—three or four millimetres—and the length is about the same, from fourteen to sixteen centimetres. The instrument is introduced along the floor of the nasal fossa like the older form of catheter, and when the beak is fixed in the Eustachian tube, suitable solutions can be injected through it, so thoroughly washing out and medicating the lower part of the canal, without the possibility of any of the fluid entering the middle ear or ascending high up in the tube, the fluid being thrown wholly in a lateral direction through the minute perforations.

In the first class of cases, those accompanied by turgescence and infiltration of the tubal lips with hypersecretion, two drachms of either of the following solutions were injected through the syringe catheter. Dobell's solution of the following formula: ℞. Acid. carbol. c. p. gr. jss; sodæ borat., sodæ bicarb. ää gr. ij; glycerinæ ♏x; aquæ dist. f ℥ j.—M. And a saturated solution of boric acid in water and glycerin, ♏xx to f ℥ j. This form of treatment has been used with especial care in six cases of chronic aural catarrh accompanied by deafness and tinnitus aurium, and in every case with very marked results; the turgescence of the tubal lips subsided, the secretion became less in amount, and the patients volunteered the statement that they felt better; hearing in all cases was improved—two, five feet improvement for voice—and the tinnitus either grew better or slowly faded away entirely. The injections were made twice a week, the nares and pharynx being meanwhile under appropriate treatment. The syringe catheter has been used as an adjunct to older forms of treatment in from twenty to thirty additional cases, of which full notes have not been kept, but in almost every instance better results were obtained than from the use of the older methods alone.

In the second class of cases either the boric acid solution or the following was used: ℞ Zinci sulph. gr. ij; acid. boric. gr. x; glycerinæ, ♏xx; aquæ dest. q. s. add. f ℥ j, twice a week, a single syringeful (℥ j) being injected into the lower end of each tube. Much less marked results were obtained in these cases, but yet far better than has been obtained by any method previously used by us. The tubal mouth soon became free from sticky mucus, hearing improved slightly, and the distressing tinnitus aurium was reduced to a minimum. The "lop-sided," "stuffed-up" feeling and dull aural pain, of which these patients almost invariably complain, were entirely relieved in the five cases in which this treatment has been regularly tried. The injections were here continued from three to six weeks.

In the third class of patients, those suffering from atrophic catarrh, but little good was achieved by the use of the syringe catheter—and the same may be said of all forms of treatment of the nasal lesions in many cases of this disease. The solutions used in these cases were a Listerine (Lambert) solution of the strength of f ℥ jss to f ℥ viij of water, and in certain forms of sclerosis Boulton's solution, of which the following is the formula: ℞. Tinct. iodini comp. ♏xx; ac. carbol. (cryst.), ♏ij; glycerinæ f ℥ ij; aq. dest. f ℥ v.—M., and place in water bath of 100° until the solution becomes colorless.

Some relief from tinnitus and slight, though appreciable, improvement in hearing were, however, obtained in some of these cases by the use of this instrument along with careful treatment of the throat and nares, the results exceeding our expectations.

We have also used this catheter in a number of cases of acute tubal catarrh following coryza, using solutions of cocaine muriate, morphine sulphate, and boric acid of various strengths, with marked benefit; and treatment by the

syringe has done much good in the severe tubal inflammation which usually accompanies purulent otorrhœa, various solutions being used. PROF. C. H. BURNETT, to whom I am indebted for many suggestions and favors while devising and testing this catheter, has used the instrument to a considerable extent in his private practice, and tells me he has had markedly good results in some cases of chronic catarrh in which it was regularly used.

Considerable care and experience are requisite to use the instrument properly; after carefully fixing the beak in the mouth of the tube, the solution must be injected without forcing the curved portion forcibly against either wall, and the moment the fluid is thrown in the catheter must be withdrawn, or the patient will be choked by the fluid deluging his larynx as soon as the palate is relaxed. Of course, the rules which govern the introduction of the ordinary Eustachian catheter must be observed here, no force whatever being used. In skilful hands we have never seen the application do any harm whatever, or cause any considerable pain.

Without claiming great things for this little instrument, a year's experience with it has demonstrated to us its great value in selected cases, and we think it may serve a good purpose in aural therapeutics.

The instrument is made by CHAS. LENTZ & SONS, 18 North Eleventh St., Philadelphia.—R. W. SEISS, M.D., in *Med. News.*

THE TREATMENT OF MALARIAL DISEASES BY PICRATE OF AMMONIA.—Picrate of ammonia possesses valuable therapeutical properties, though it does not seem to have received the attention which it deserves. The characters, properties, and uses of this substance were carefully investigated by DR. DUJARDIN-BEAUMETZ, and the results were communicated by him to the Therapeutical Society of Paris in 1872. The salt had previously been successfully used in the treatment of intermittent fever by DRS. BRACONNOT, CALVERT, ASPLAND, BELL, and others. DR. BEAUMETZ'S investigations confirmed the results at which these observers had arrived, and showed that in this substance we have a valuable, and efficient substitute for quinine in the treatment of malarial diseases. It appears to have passed out of mind, and, as far as I can gather, has never been used in India. My attention was directed to it accidentally in the following way: I had a patient under my care at a hill sanatarium who had suffered for seven months from severe intermittent fever of the quotidian type. Quinine, arsenic, and other antiperiodics had been, and were, freely used, but failed to give relief. After ten days' treatment the fever still recurred daily with its accustomed severity. At this juncture the local chemist told me of a remedy for fever, which he had received some years previously, but had never tried. This I found to be picrate of ammonia. I gave it to my patient, with very gratifying results. The fever did not recur next day, nor did it do so at any time during the three subsequent months in which she remained under my observation. I have since then constantly used the picrate of ammonia in the treatment of malarial diseases. There has been ample opportunity to test it fully, for Amritsar is notorious in the Punjab for its unhealthiness, and diseases of this kind are severe and frequent. During a period of four years and a half, I have treated over 10,000 cases of these diseases with this agent, with the happiest results. So uniformly successful has it been that I have in our very extensive practice here, given up the use of quinine and the cinchona alkaloids for the treatment of intermittent fever, and have substituted picrate of ammonia for them. A record was kept of 5,000 cases of intermittent fever treated with this agent. Of this number, in nine cases only did it fail to cure, and in these quinine succeeded at once. I usually give it in doses of from one-eighth of a grain to a grain and a half, four or five times a day in pill. Half a grain is a fair average dose. Thus given, the result is soon visible. In the great majority of the cases treated, half-grain doses in the interval prevented the recurrence of the next attack of the fever, while in about 20 per cent. of the patients two or three attacks followed before the fever ceased. In one case of quartan ague, despite large doses of the salt, the fever recurred for six periods, gradually diminishing in intensity, and then yielded to it. It is equally successful in all the forms of ague, but it is a curious fact that the cases in which it failed to cure were all of the tertian variety. I have also employed this agent in the treatment of twenty-five cases of malarial neuralgia of various nerves, six cases of malarial headache, and one of malarial colic. In all these instances it cured completely and speedily. In remittent fever it does not appear to be of use; six cases of a severe type were treated without any effect. Neither is the enlarged spleen of ague benefited by it. I have given it in numbers of such cases in conjunction with ergotine with good results, but such results are secured equally by the use of the ergotine alone.

My experience leads me to the conclusion that in all varieties of intermittent fever, and in malarial neuralgias, picrate of ammonia is a valuable antiperiodic, and it is an efficient and perfect substitute for quinine. It has the following advantages over quinine: 1. It is much less expensive. This is an important consideration where, as in Indian practice, hundreds of cases of malarial diseases have to be treated annually. 2. The dose given is very much smaller. 3. It does not produce the unpleasant effects that quinine does—headache, deafness, tinnitus, etc.; nor does it disorder the digestion or cause nausea, as quinine is apt to do, in the doses in which it has to be given in India. —H. MARTYN CLARK, M.B., C.M., Edin., in *London Lancet*, Feb. 19, 1887.

FORMS OF ALBUMINURIA NOT DANGEROUS TO LIFE.—In this age of refinement in diagnosis we are apt to place too much stress on some special symptom to the neglect of the general features of a case. Thus, in the hands of many physicians the stethoscope has led to error when the presence of a murmur has been regarded as proof of the existence of heart disease. So also albumin in the urine has for years been considered by the profession and the public as an occurrence of the gravest moment, indicating serious, if not irreparable, disease of the kidneys. In the American Jour-

nal of the Medical Sciences for January, 1887, GRAINGER STEWART has a very timely article "On Some Forms of Albuminuria not Dangerous to Life," from which we may derive several important lessons. He does not consider accidental albuminuria, due to admixture of the urine with blood or pus, nor the febrile form, nor that due to passive congestion. Four categories are defined, the cases in which, though varying greatly, may with advantage be distinguished from each other, viz., paroxysmal albuminuria; dietetic albuminuria; albuminuria from muscular exertion, and simple persistent albuminuria.

Paroxysmal or intermittent albuminuria is characterized by the sudden occurrence of albumin in the urine, often in large amount, with numerous tube casts, the process lasting a variable time, perhaps only a few days and occurring at intervals without any appreciable cause. This form is most commonly met with in young adults who are the subjects of some constitutional taint, and the attacks are apt to be brought on by cold or exposure, and by errors in diet. It has close relationships to intermittent hæmoglobinuria, as very clearly pointed out by RALFE, in the British Medical Journal of November 27, 1886. In fact, the attacks may alternate, and this writer brings forward evidence to show that "functional albuminuria is only a minor manifestation of hæmoglobinuria and that the two conditions may merge one into the other." Both conditions are induced by increased destruction of blood-corpuscles—hæmolysis—probably in the liver. The explanations offered of the process are purely hypothetical, but it is satisfactory to learn that the attacks do not prove permanently injurious. STEWART recommends chloride of ammonium as a suitable remedy, while RALFE relies chiefly upon arsenic, which seems to have the power of lessening the hæmolytic action of the liver and at the same time strengthening the resisting powers of the corpuscles.

Of dietetic albuminuria, which is more common, the writer gives several very instructive examples and recognizes three factors as possible existing causes: First, the use of certain kinds of food; second, the entrance of food (of any kind) into the stomach; third, one or both of these in association with other influences, such as exercise or the time of day. A most curious fact is the appearance of albumin immediately after taking food into the stomach, the nature of the diet having little or no influence. In such instances the time which elapses between the ingestion of the food and the appearance of the albumin is so short that we must suspect a reflex vascular influence. In other cases the increase in the saline constituents of the blood after a meal may increase the diffusibility of the albumins and permit of their filtration in small amounts through the capillaries of the glomeruli.

Albuminuria following muscular exertion has long been recognized, and of late years several important memoirs have been written on the subject. STEWART reports two cases very fully in which a careful study excluded all causal conditions save exercise. The mere fact of rising seems to have an influence in inducing the albuminuria, for in his first case neither exercise in bed nor massage caused any change in the urine, while the change from the recumbent to the erect posture was invariably followed by the onset of albumin. In the state of our present knowledge we cannot give a satisfactory explanation of these cases, but it is very important to recognize their existence. In treating such cases rest and a careful diet will usually suffice to remove the condition, which is usually transitory. The use of ergot and belladonna is suggested.

Cases of the fourth category, simple persistent albuminuria, are more rare and the condition is much more difficult to separate from one of positive renal disease. The principal features of these cases are the continued presence of albumin, without tube casts, and without cardio-vascular changes, or signs pointing to subacute nephritis. The health may not be seriously impaired for years, but the prognosis in these cases is more serious as the condition may culminate in organic disease. In distinguishing between the functional and organic cases STEWART lays stress upon the quantity of urea, the presence or absence of tube casts, and the state of the cardio-vascular system. In the fourth category, he says: "So long as the solids are in normal quantity and the vascular changes do not manifest themselves, we may speak hopefully even in such cases."

This writer gives a more favorable opinion of these cases than has hitherto been expressed, but we feel certain that it will be justified by future experience. A very large amount of mental worry and suffering is annually caused by the widespread belief that the presence of albumin in the urine is an indication of the gravest character, and by too many, both lay and medical, the condition is regarded as identical with Bright's disease. PROF. STEWART'S article will do incalculable good in helping physicians to discriminate between the non-dangerous and the serious forms of albuminuria.—*Med. News*, Jan. 15.

THE THERAPEUTICS OF ASTHMA.—Within the past few years the interest of medical men in the subject of the treatment of asthma has received a fresh impetus from the birth of a new theory of the pathology of the affection. As is well known, HACK and a number of other observers have drawn attention to abnormal changes in the turbinated bones, and in the mucous membrane of the nose and the pharynx, as the chief factors in the causation of a large percentage of the cases of asthma. HACK laid particular stress on swelling and hypertrophy of the inferior turbinated bones, and recorded several cures brought about by cauterizing or removing the hyperplastic tissue. Since the publication of his article, specialists and general practitioners have, with the aid of highly magnifying reflectors, seen hypertrophied turbinated bones in many an asthmatic patient, which there was a great temptation to reduce, either with some ingenious instrument, with the galvanic cautery, or with a powerful escharotic. Although the results have not been so gratifying as HACK'S, they have gone far toward affording an apparent verification of his theory; for, if the so-called hypertrophied turbinated bones could be detected at first only with the aid of magnifying reflectors, it was not long before they were sufficiently hypertrophied to be distinct even to the naked eye.

The pendulum, however, is beginning to swing back, as is evident from a recent lively and protracted discussion at several consecutive meetings of the Berlin Medical Society. A number of speakers took part in the discussion, and there seemed to be a consensus of opinion that cases in which asthma was benefited by cauterizing the nasal mucous membrane or the turbinated bones were extremely rare. Such treatment, it was said, should not be employed until a careful examination had been made with a sound, the parts having been made anæsthetic with cocaine, and an area discovered a touch upon which would call forth an attack. SCHADEWALD broached a novel method of treatment, based on his no less novel theory of the pathology of the disease. He maintained that bronchial, or true, asthma was due to a neurosis of the trigeminal nerves, and should be treated by faradization of those nerves, the applications being made during an attack, as, if made in the intervals, they would call forth a paroxysm. LUBINSKI emphasized his previous remarks as to the benefit to be derived from inhalations of pyridine, but the drug must be used with caution, as disagreeable and alarming symptoms may follow its injudicious use. Amyl nitrite, nitro-glycerin, and sodium nitrite act in the same way as pyridine, but all these remedies find their more appropriate application in cardiac asthma.

If any drug deserves the title of a specific in this affection, it is potassium iodide. The remedy was first recommended in asthma by TROUSSEAU, but this use of it fell into oblivion for a number of years, to be recently restored by the publications of LEYDEN and GERMAIN SÉE, the latter of whom recommends its administration with lactucarium. Potassium iodide is of great service also in the purulent bronchitis which occurs as a sequel to asthma. In many cases of this condition the various balsams are efficacious, and LUBINSKI has observed excellent results from the use of Peruvian balsam combined with myrrh, the former in doses of from a grain and a half to three grains three or four times a day. If there is really a nasal affection, it should be treated according to its character, and not on any far-fetched theory of its ætiological importance. But, in the treatment of asthma, it is of the greatest moment to distinguish true, or primary, asthma—by no means a common affection—from that which is secondary to disease of the heart or lungs. We need scarcely say that we have had only the former in view in this writing.—*N. Y. Med. Jour.*, Feb. 13.

HYPODERMATIC INJECTION OF FOWLER'S SOLUTION IN CHOREA MINOR.—To fairly test the value of hypodermatic injections of Fowler's solution of arsenic in the treatment of chorea minor, especially as compared with its internal administration, almost all cases of this disease admitted during the last year to St. Anne's Hospital for Children, in Vienna, service of PROF. WIDERHOFER, have been subjected to this treatment. For the sake of comparison a few cases were treated by Fowler's solution given internally. The results of the clinical experiment, which have been highly satisfactory, are detailed by DR. FRUHWALD, assistant to PROF. WIDERHOFER, in the Jahrbuch für Kinderheilkunde. Equal parts of Fowler's solution and distilled water were used, care was taken to have the preparation fresh, and to have it freshly filtered before injecting it. One injection was given a day, alternately into the extremities, the needle being inserted deeply into the tissues and the surface having been well washed with thymol water. Treatment was begun by injecting up to the first division mark of a Pravaz syringe, the dose was increased day by day by one additional part until eight or ten additional parts were reached, and then as gradually reduced until the original dose was again attained. In increasing the dose attention was given not only to the age of the patient and to the severity of the disease, but more especially to the signs of improvement that became manifest.

In those cases in which the remedy was given internally the initial dose was five drops per diem; this was increased by one or two drops a day until 20 or 25 drops were reached, when it was as gradually reduced to the first dose. Of the twenty-five cases, almost all of which came under treatment at the height of the disease, twenty-two were treated by injection, three by the internal administration of Fowler's solution. There were eighteen girls and seven boys, aged from 5½ to 14 years, all of feeble constitution, anæmic, and of irritable disposition. As to cause, fright or some other psychical disturbance brought on the disease in nineteen; two were relapses. Only in four could a relation be traced between acute rheumatism and the chorea. At first, in three cases, redness of the skin at the punctures, and in two of them abscesses, developed, and these were subsequently treated by internal medication; but afterwards, when the injections were carefully made in the manner described above, no troublesome complications further set in.

As to the curative results obtained, both physicians are compelled, from their experience with the two ways of giving arsenic, to give decided preference to the treatment by injection. Where it was employed, pronounced improvement set in in a remarkably short time (one to two weeks), and a permanent cure was established by the third or four week; at least, only one relapse has been reported. They attributed this favorable result to the more rapid absorption of the preparation subcutaneously. They regard absolute rest in bed, at least until marked improvement has set in, as a powerful auxiliary, as also a nourishing diet and tonics, especially during convalescence.

They conclude that no one should be deterred from pursuing this line of treatment by the psychical excitement to which the giving of the injection may give rise in some children, or by the slight and easily avoidable local complications, for by this method brilliant results can be obtained in the largest number of cases, and exceedingly satisfactory results even in the most obstinate.—*Jour. Amer. Med. Assoc.*, Feb. 26.

PEPSIN INJECTIONS IN TUMORS.—DR. W. H. MORSE, in the *Med. Register*, reports his use of pepsin (JENSEN'S crystal) in the local treatment of tumors. He used one part of the pepsin to three of distilled water. He writes:

"My results have 'almost always' been uni-

form, and in referring to the exceptional cases do not understand me as having occasion to find fault with the pepsin. The sole reasons for failure have been due to extraneous causes, or when the neighboring lymphatics were involved. Thus in the main, my results have tallied with those of THIERSCH, NUSSBAUM, and BROADBENT, and this, both as regards benign and malignant tumors, some of them unmistakably cancerous.

"Reports of cases are, at the best, dull reading, and moreover are more dull to write, therefore, I will not burden the busy reader with the details of my note-books. Yet, as to the matter of proof, I will submit something in the way of items.

"1. Recurrent carcinoma, as large as a hen's egg, seated in the right side of the inferior maxilla; suppuration excited by injection, and the tumor diminished to size of a hazelnut.

"2. Another carcinoma of same size, situated in the right breast of a woman; suppurated after seven injections; and in the course of a month the residuary nodule was scarcely as large as a marrowfat pea.

"3. A primary carcinoma of the size of a turkey's egg, situated back of the ear of a young man, was treated in the same way to one injection every twelve hours; after twenty-one injections, suppuration took place; ultimately an entire disappearance of the tumor.

"4. Subcutaneous nævus, angle left eye; child; size of filbert; suppuration avoided only by occasional injections; after four months, reduction complete, save the clot.

"5. Interstitial fibroid of uterus; needle introduced through the vagina; anæsthetic employed; after several injections all accompanying symptoms removed, and the cure was considered complete."—*Med. and Surg. Reporter*, April 16, 1887.

THE TREATMENT OF PHTHISIS BY LARGE DOSES OF TANNIN.—The French are most prolific in devising new methods of treating phthisis. No sooner is the medicated gaseous enemata process well established in the hospitals than DRS. ARTHAUD and RAYMOND announce something still better, or at least simpler. They began by experimenting on rabbits, in order to find some substance which would render them non-susceptible to inoculations of tuberculous matter. They found tannin to produce some very remarkable results. The Paris correspondent of the British Medical Journal writes: "Six rabbits were treated for a month with doses of tannin, varying from fifty centigrammes to one gramme; after two successive inoculations, one with lung-tissue from a patient who had died of acute tuberculosis, the other with miliary tubercle from a hospital patient—no trace of infection was observed, while three other rabbits, to which tannin had not been given, succumbed in consequence of inoculations with the same material. These experiments suggested a mode of treatment which has been adopted with excellent results in over fifty cases. Tannin was given in doses of from two to four grammes a day, and the improvement was visible at the end of a fortnight, the patients had increased in weight, and no relapse occurred. In cases of acute tuberculosis, both in children and adults, it sometimes happens that the symptoms appear less favorable: but, at the end of a week or a fortnight, the patient's condition improves, even when fatal results have been feared. From these experiments the following conclusions may be drawn: (1) That tannin is preferable to sulphur of carbon or iodoform in the treatment of tuberculosis; (2) that animals submitted to this treatment for a month offer great resistance to the action of tubercular virus."—*Medical Record*, Jan. 22.

DECOCTION OF COTTON-ROOT AS A HÆMOSTATIC.—Having repeatedly tried cotton-root, in form of a fluid extract, as a uterine hæmostatic without marked beneficial results, our conclusion was that the remedy was without any great value. The experience of DR. GARRIGUES, as made known in the Quarterly Bulletin of the Clinical Society of the New York Post-Graduate Medical School and Hospital, proves that the drug given in the form of decoction produces markedly beneficial results. The following are his directions for preparing and administering it: Three heaping teaspoonfuls of the powdered root are boiled in a pint of water for fifteen minutes; after cooling, the preparation is strained; one-third of the decoction is taken in the forenoon, another in the afternoon, and the last at bedtime.

DR. GARRIGUES has used the remedy in 139 patients, and in the great majority of cases with more or less decided benefit. He has found that it checks the bleeding from uterine fibroids, and also lessens the associated pain; while in sarcoma and carcinoma it limits, or altogether suspends, for a time, hemorrhage. He insists that the remedy should be used in the form of a freshly-made decoction, and states that it fails to produce any benefit in about one in ten cases, which is certainly not an unsatisfactory showing.

The attention of the profession will doubtless be directed anew to the use of this remedy by the important and apparently conclusive results obtained by DR. GARRIGUES, who, as is well known, is one of our most capable and conscientious observers.—*Med. News*, Feb. 12.

ANTIFEBRIN IN TYPHOID FEVER.—DR. A. BEREZOVSKY, of PROF. KOTOVSHTCHIKOFF'S clinic, in Kazan, writes (Russkaia Meditzina, No 43, 1886, p. 728) that the perusal of DRS. CAHN and HEPP'S paper (in the Centralbl. für Klin. Med., No. 33, 1886, p. 561) has induced him to carry out a series of observations concerning the action of antifebrin in febrile patients (mainly in those suffering from enteric fever). The outcome of his experiments is this: 1. Even small doses (four-grain ones) produce a marked fall of febrile temperature (0 9° to 2° C. in an hour after the administration). 2. The duration of action of the drug is different in different types of fever; it is relatively shorter (1½ to 3 hours) in the case of febris continua; it is longer in remittent fever. The latter may be suppressed comparatively easily; the normal temperature may be kept up by giving four-grain doses every two hours; however, the fever returns immediately after discontinuing the drug. 3. Antifebrin reduces the frequency of the pulse from 8 to 22 beats a minute. 4. The blood-pressure (as measured in the radial artery by means of BASCH'S sphygmomanometer of an

aneroid variety) markedly rises after a dose of antifebrin. The same result is obtained on measuring the arterial tension by means of FILIPOVITCA'S palpatometer. 5. The amount of urea decreases with the fall of temperature. 6. Patients take antifebrin readily. The drug markedly improves appetite and does not give rise to any unpleasant symptoms, such as vomiting, etc.—*London Medical Record*, Jan. 15, 1887.

RECTAL INJECTION OF CHLORAL IN VOMITING OF PREGNANCY.—In the vomiting of pregnancy, where the causes are so obscure and probably so various, we are forced to call the trouble reflex in character until its etiological factors are more clearly demonstrated. Certain it is that those remedies and methods of procedure for its treatment which have met with greatest favor are mostly directed toward a diminution of the reflex irritation and spinal irritability (under methods of procedure may be included cervical dilatation, removal of inflammation, uterine displacement, etc.) These actions are possessed in a high degree by chloral and must, in the absence of any convincing physiological data, account for its value in this affection. The use of chloral in the vomiting of pregnancy is recommended, especially in enemata, by PLAYFAIR, LEISHMAN, BUSEY, ATKISON. EULENBERG, RICHARDSON, of Boston, and SIMMONS, of Yokohama. In conclusion, I would state my conviction that, while it should be given in large doses to be effective, it is not safe to employ the rules for rectal dosage usually followed in the administration of dry extracts and less soluble medicines. If the rectum be cleansed, the dose ordinarily should not be increased more than twenty per cent. above the proper dose in the individual case *per os*. DR. REAMY cites a case in which forty grains of chloral injected into the rectum at once arrested the vomiting.—DR. T. A. REAMY, *Retrospect*, Jan., 1887.

INFLAMMATION OF THE HAIR FOLLICLES WITHIN THE NARES.—For this painful, annoying, and sometimes very obstinate disease, which is often called eczema, DR. HARDAWAY, of St. Louis, has found the best treatment to be the administration of cod-liver oil with hypophosphites, and the local application of glycerin to which is added two drachms of Squire's glycerole of the subacetate of lead (Jour. of Cut. and Ven. Dis., Dec., 1886, p. 360). Sometimes he commences the treatment of a case by giving one-tenth of-a-grain dose every third hour of the sulphide of calcium. The glycerin is to be applied with a camel's-hair brush, both to the inside and to the outside of the nose; the parts are to be fomented several times a day, the hairs are to be plucked from the inflamed follicles, and when suppuration occurs the pustules are to be lanced. When the pain and tension have subsided, the following ointment is to be used:

℞ Squire's glycerol. plumb. subacetat., ʒ ss.
Glycerin, ʒ jss.
Ung. aq. rosæ, ʒ j.
Ceræ albæ, q. s.
M.

The formulæ for Squire's glycerole is as follows: Acetate of lead, 5 parts; litharge, 3¼ parts; glycerin, 20 parts, by weight. Mix and expose to a temperature of 350° F., and filter through a hot-water funnel.—*N. Y. Med. Jour.*, Feb. 19.

LUNG SURGERY.—In connection with recent remarks on the subject of gangrene of the lungs in the *Medical News* of November 13, 1886, and on that of the injection of iodoform and ether in our issue of December 18, 1886, it is interesting to note that ARTHUR RANSOME, at the meeting of the Manchester Medical Society, November 3, 1886, reported a case of gangrene of the lung, and four cases of phthisis in which he had employed intra pulmonary injections of iodoform dissolved in ether, in olive oil, and in oil of eucalyptus. Of these various vehicles he thought the last to be the best. In each of the cases of phthisis from two to eight injections had been used, and temporary benefit had been secured in two of them. In one case symptoms of iodoform poisoning appeared, and in one temporary pneumothorax. In the case of gangrene of the lung, hemorrhage from the lung followed the injection.

It would be interesting to know more of the details of these cases, and to be able to determine how much of the effect which follows the injections could be fairly attributed to them. It is not surprising that RANSOME found oil of eucalyptus the best vehicle for iodoform in his operation, for it is, in itself, a useful medicament for putrid cavities in the lungs. Ether, as a vehicle, we would hardly expect to be suitable for intrapulmonary injection. The dangers to which we alluded on a previous occasion would, we think, preclude it from serious consideration in connection with disease of the lungs.—*Med. News*, Feb. 26.

DE CHAMPEAUX ON THE TREATMENT OF CHRONIC DIARRHŒA BY SULPHO-CARBONATED WATERS.—Case 1. M., aged 22, had suffered from chronic diarrhœa off and on for two years. He had his first attack of dysentery in June 1884, and was twenty-one days in the hospital at Saigon. Since that time he has never been entirely free from it, and his motions were frequent and horribly fœtid. The treatment by means of water shaken up with bisulphide of carbon was then begun (July 18), in doses of from one to four tablespoonfuls in milk, daily. On Sept. 29 the patient left for a convalescent home. He had only one (formed) motion in twenty-four hours, and his general health had much improved. Case 2. L. M., aged 45, had suffered from chronic diarrhœa for three years. On Aug. 16 this treatment was started, and a gradual improvement manifested itself, the patient having recovered sufficiently to leave the hospital by Sept. 27. Both of these cases were of a severity and chronicity which are generally considered incurable. The carbo sulphuretted waters act, he considers, as a disinfectant, and destroy the micro-organisms which cause the fœtor and irritation.—*London Medical Record*, Jan. 15.

SCROFULOUS NECK—LOCAL APPLICATIONS.—I take it that the day of local applications is over. It is no longer a routine measure to paint

iodine over the skin of the neck in all cases of cervical gland enlargement. Such painting appears to be of the most use in certain chronic cases where the glands—few in number—have become quite inert, listless, and free from all tenderness. In a large number of instances it does harm, probably by adding to the disturbance already existing in the periphery. Suppuration in glands has, I think, been often determined by iodine paint used by lavish hands. In some slowly-progressing cases, where the glands are not tender and there is no distinct evidence that suppuration exists, a steady rubbing of the part with the ointment of the iodine of lead appears often to effect considerable improvement. Poultices of seaweed and compresses of salt water do little more than divert the patient and increase his risks of catarrh. In early cases, where the trouble is active and progressing, the use of the cervical splint alone is the most effective of local measures. With its application the parts are placed at rest, the glands cease to be painful, and very commonly cease to increase. The same may be said with reference to chronic enlargements that have become once again the seat of active change. —Mr. Fredk. Treves, *Retrospect.* Jan. 1887.

Ichthyol.—That there really is some decided virtue in ichthyol has now been proved by extensive observations, which were made in the Charité Hospital at Berlin.

The remedy exerted a great influence in all forms of rheumatism, lumbago, gout, neuralgias, contusions, hemorrhages, burns, in case of pityriasis, seborrhœa, ichthyosis, eczema, lichen, prurigo, pruritus, herpes, acne rosacea, psoriasis, erysipelas, furunculosis, lymphangitis, panaritium, lepra, and also in some acute exanthemata. It acts as a disinfectant, contracts the vessels, and is astringent and drying, and may be used without danger for a long time externally. As a rule ten to fifty-per-cent. solutions or salves are employed; also ichthyol wadding, plaster, soap; internally capsules containing 10-per-cent. solutions of the remedy in either, alcohol, glycerin, or water, and about eight to fifteen drops, or pills.

The remedy can now be obtained here in its pure state and at a reasonable price, and should be tried to determine whether it will act here as well as in Europe, though one observer remarked some time since that under certain climatic influences the remedy did not act so well. Probably it was adulterated.—*Med. and Surg. Reporter*, Jan. 8, 1887.

Eucalyptol in Phthisis.—Bouveret has employed hypodermic injections of eucalyptol in the treatment of phthisis. The daily dose of the antiseptic has varied from one gramme and a half to two grammes and a half. The duration of the treatment has been from fourteen to sixteen days. Sixteen cases of phthisis were treated by this method; six of the number had fever, and the remaining ten were without fever. There was rarely any local disturbance at the site of injection. It was certain that the antiseptic was absorbed; it could be detected in the breath but not in the urine. Albuminuria was not observed as the result of the treatment. It was very doubtful whether the number of bacilli was altered in any way by the method of treatment. Sweating, as a rule, was diminished. Its chief effect is as a balsamic preparation on the bronchial secretion, which it influences favorably. MM. Perret and Chabbannes have made experiments with the 5 per-cent. solution of eucalyptol, injecting a mixture of it with tuberculous matter under the skin of guinea-pigs. The general conclusion at which they have arrived is to the effect that the antiseptic is utterly insufficient to prevent the activity of the micro-organism that causes artificial tuberculosis.—*London Lancet*, Feb. 19.

Iodoform Vaseline in Small-Pox.—Dr. Colleville recommends in the Union Médicale du Nord-Est a vaseline ointment of iodoform, of the strength of 1 to 20, as not only an antiseptic emollient gratifying to the patient, but as somewhat anæsthetic and as preventive of the formation of foul-smelling scabs and of pitting. Dr. Colleville has observed that in a case of confluent small-pox where iodoform ointment was frequently applied, the vesicles were prevented from developing into pustules. No signs of iodoform poisoning have been observed in any of the ten cases in which this treatment has been employed. —*Amer. Med. Digest*, Feb. 15.

The New Non-alcoholic Stimulant Galazyne.—Dujardin-Beaumetz gives the following formula:

Brewers yeast, 4 grams.
Sugar, 10 grams,
Cow's milk, 1 liter.

Dissolve the sugar and yeast in a little water, add to milk and keep securely corked in a cool place.

The product contains from 1 to 2 per-cent. of alcohol.—*Amer. Jour. of Pharmacy.*

Bicarbonate of Soda in Tonsillitis.—The treatment of tonsillitis by frequent local applications of bicarbonate of soda, which has been practiced and recommended by Dr. D. Juan Gine, has been put to a series of tests by another Spanish physician, Dr. D. Rovira y Oliver, who deduces from them the opinion that, though it is often beneficial in cases where the parenchyma of the tonsil is affected, it is of much less value than many other applications in cases which are mere superficial and catarrhal.

Piscidia Erythrina as a Uterine Sedative.—Dr. Lessona ("Gazz. delle cliniche;" Centrlbl. f. Gynäk."), reports a hundred and six cases in which tincture of *Piscidia erythrina* was given to the amount of from 75 to 225 minims within an hour or an hour and a half, on account of after-pains or threatened abortion. Favorable effects were produced in seventy-one per cent. of the cases.—*Med. Record*, Jan. 1887.

The Medical Age.

Vol. V. DETROIT, MAY 10, 1887. No. 9.

Original Articles.

A SUCCESSFUL CASE OF RHINOPLASTY.

BY DANIEL LA FERTÉ, M. D., PROF. OF ORTHOPŒDIC SURGERY AND CLINICAL SURGERY, DETROIT COLLEGE OF MEDICINE.

When the subject of this article came to us for treatment he presented a rather pitiable appearance. He was recognized as an individual who was frequently seen walking the streets of Detroit. His appearance was more noticeable because the poor fellow had not ventured out in the streets for years without a folded handkerchief stretched across the middle of his face and pinned behind his head.

The gaze of those whom he met, attracted to him by this bandage, was very mortifying to him. His realization of the enormity of his deformity weighed heavily on his mind. He went about in a dejected and despondent sort of manner, with his hat drawn down over his eyes, and his head inclined towards his feet, with a shield over his face. His features presented the appearance shown in Fig. 1.

FIG. 1.

He came with a firm determination to have his deformity overcome, if such a thing were possible. He said he was tired going about the streets with his face tied up and having every one he met stare at him. He said that it was a great drawback to him in earning his living. Being a paper-hanger by trade, brought him to work in-doors, and on many occasions he lost his situation because ladies complained that he was too horrible a looking creature to have around the house.

On being asked about the origin of the trouble, he stated that eight years before he contracted a chancre, which was burnt by a physician and healed up rapidly. Thinking himself completely cured, he did not take any medicine. He remained in apparently perfect health for about eighteen months after the healing of the chancre, when, as he says, he was attacked with a sore eye. Of the exact structures of the eye first involved, we are unable to state, as we get this history from no one but the patient himself. The trouble in the eye (right one) went on to almost total destruction of the eyeball, there being only a small, movable stump left in the socket. The integument of the lids on the right side present a scarred appearance, similar to that which would be produced by a burn. This eye was treated with local medication alone, the attending physician having no suspicion of the origin of the trouble. Before the ravages in the eye had been subdued, his throat and mucous membrance of the nose became involved. About this time the post maxillary cervical glands became involved, and the skin over them inflamed and broken down, as is evidenced by the existence of large scars on the sides and back of the patient's neck. At this time he began to take internal medicine, but not before, as the theory was adhered to that catarrhal trouble was that which ailed his throat and nose. During all this time the all-embracing arm of general syphilis was allowed to include almost all the tissues of the body within its grasp.

We found him eight years after the appearance of the chancre and five years after all progress of the malady had been subdued, in the following condition:

The nose was entirely gone. The bony structures entering into the formation of the bridge of the organ were also destroyed. Looking into the opening on the face we discovered that the turbinated bones and the septum of the nose were completely destroyed. Looking downwards in this opening the entire dorsal surface of the tongue could be seen, the whole substance of the hard and soft palates having been entirely destroyed.

It is almost needless to say that his speech was almost entirely unintelligible.

It is not to be wondered at then that a person with such a hideous deformity should be as anxious to undergo an operation as this man was. He begged that something might be done, and when told that these cases were not promising ones at best, and that his was particularly discouraging on account of there being no bridge or stump on which to build a nose, his answer was that he would take the chances of a bad scar on his forehead and an entire failure to construct a nose.

Accordingly, as a preliminary preparation of the system, he was placed on quinine and tincture of iron for ten days before the operation. On the day of the operation I drove to an establishment where wax flowers are made and procured a few pieces of sheet wax. From three thicknesses of this I made a wax mold representing the lost organ, and placed it *in situ*. When we were satisfied about the shape, etc. of the mould, we were prepared to cut out a pattern for the flap to be raised from the forehead. This wax mold was then spread over a piece of soft leather and a piece of the same shape cut from the leather, only it was made about one-third larger than the mould to provide against shrinkage, which is sometimes very considerable in these operations. The flap which was raised from the forehead in this case measured three inches and three quarters in length. In this measurement is included the length of the column (one inch) which was intended to form the septum between the nostrils. The width at the base was two inches and three quarters. The incisions were carried through the periosteum down to the bone. In making the incisions at the lower part of the flap, we are advised to carry them only as low down as the inner extremity of the eyebrows, but in this case they were carried to a point almost opposite the inner canthus of the eyes. This was done with a view of having a long pedicle, so that when the flap was turned over there would be formed a sort of knob to supply the place of the missing nasal bridge.

We found no difficulty now by the aid of a periosteum elevator, in raising the flap and periosteum from the bone.

The next step of the operation consisted in making an incision around the circumfereuce of the opening in the face to receive the flap. These incisions were made in a manner to imitate as nearly as practicable the tongue and groove suture of the late PROF. JOSEPH PANCOAST. The claims made in favor of the suture, viz., that it brings four raw surfaces in contact with one another instead of two, and therefore give better chances of healing, have been verified in this and other plastic operations in our practice.

After the frontal flap had been stitched in this manner, to the face, around the circumference of the anterior nares, all that remained to be done with the flap was to fix the portion intended to form the septum between the nostrils to the upper lip. In order to more surely have adhesion take place, the integument was cut off from its extremity, before it was implanted and stitched to the transverse opening which was made in the upper lip, near its junction with the natural septum of the nose. At this stage of the operation we experienced some slightly troublesome hæmorrhage from the artery of the septum. Small rubber tubes surrounded by absorbent cotton were now inserted in each nostril, for the purpose of affording support to the new nose, prevent adhesion of the opposite surfaces, and to facilitate respiration. A careful examination was then made of all that had been done to satisfy ourselves that everything was satisfactorily done, especially that approximation of different parts of the flap with incision in the face was complete, and that there was no undue tension on any of the parts.

Though the pedicle of the flap seemed to be exceptionally abundant it was not interfered with as it had been trimmed with a view of making it of that shape, to supply the missing bridge of the nose. We saw no reason why a sufficiently firm bridge of cicatricial tissue could not be made in this way, and the subsequent result in this case proves this view to have been correct. To be sure we could have excised the ungual phalanx of one of the fingers, stripped it of the nail and implanted it in the nasal notch of the frontal bone, but this makes the operation more prolonged and tedious, lays the flap open to more chances of sloughing and we doubt if it could give results superior to that obtained in this case (Fig. 2) where we have a nasal bridge

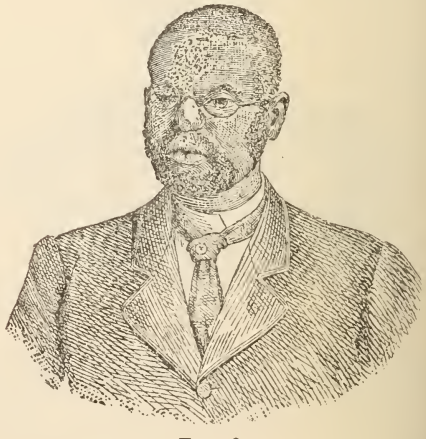


FIG. 2.

as perfect as it could possibly be made by any artificial means.

The dressing in this case was very simple, and consisted of absorbent cotton and carbolized

oil placed along the line of the sutures, and oakum and carbolized oil over the open wound in the forehead.

The healing process went on in a most satisfactory manner. We had no secondary hemorrhage, no erysipelas and not the faintest sign of loss of nutrition in the flap, three factors which sometimes play a very prominent part in foiling the surgeon's sanguine expectations. The tubes were removed from the nostrils daily, washed and replaced.

On the sixth day, as the tubes were being removed the periosteum came away in the shape of a slough. This, although it was looked upon as a mishap at the time, did not prevent the formation of a nose sufficiently firm with connective tissue to keep its shape properly, when all support was removed. At the end of the fourth week the alæ of the nose were trimmed off as they extended a little too far down over the upper lip.

We felt particular interest to see how the wound in the forehead would heal over, and the bare bone receive its cover. From the dimensions of the flap which were given above, it will be seen that quite a large patch of the frontal bone was exposed. It was gratifying to observe that the favorable progress towards healing which was noticeable in the flap on the face, was apparently going on also in the forehead.

At a time when the wound had healed from its circumference to about two-thirds its original size, its surface become coated with a very thin layer of gelatinous material which gave it an appearance as if a thin coating of varnish had been applied. In twenty-four hours after this was first noticed, minute red bodies about the size of a millet seed made their appearance here-and-there over the bone. These multiplied very rapidly and in forty-eight hours more the bone was well covered with healthy granulations. To hasten the healing process and leave as small a scar as possible, eight skin grafts were taken from the arm and inserted in the granulations. Everyone of these took hold and in a few days more the wound was entirely healed.

Fig. 2 shows his appearance three months after the day of operation. It was not our intention to have him photographed so soon, hoping that time would perceptibly diminish the scar on the forehead, but he was very anxious to remove to a town up the lakes to follow the occupation of barber, which occupation he is still pursuing. The spectacles which are observed in this plate, were put on by the patient, without our knowledge, when he sat for his picture. He gave as his reason for so doing, that he supposed it would make a better picture if he hid the cavity in his right eye (orbit). If this patient had remained here it was the intention of PROF. LUNDY of this school to reconstruct his lid and supply him with an artificial eye.

Three months ago, or one year after the operation, he visited us at our clinic. We found him enormously increased in flesh. He himself stated that he had gained over fifty pounds since he left Detroit. It was pleasing to notice that the nose had suffered no shrinkage, but presented the same appearance that it did when he went away.

It will be remembered that we stated in this article that the bones of the palate were completely destroyed.

This man discovered that when his nostrils were clogged up his speech was improved, so acting upon the hint thus obtained he allowed the openings of the nostrils to granulate completely, and as he expressed himself, and as was quite noticable, his speech was very much improved.

SHALL OUR ARMAMENTARIUM CONSIST OF MANY REMEDIES OR FEW?*

BY M. F. CUPP, M. D., METAMORA, IND.

An editorial entitled "Nihilism in Therapeutics" appearing in an eastern medical journal, has suggested to me a discussion of the question: Shall we practice on the principle of few medicinal agents, or on the broad ground that every remedy with which we are acquainted shall be tried where it offers a basis for hope? This writer says: "It is far better to have a complete and extended knowledge of the twenty old standard drugs of our fathers, and the disposition to confine ourselves to them, than to have poorly-defined ideas of the action of everything which is advertised, and an uncontrollable desire to try them all at the first opportunity."

We presume few men will be found willing to dispute this self-evident truth. Yet it is inconceivable that it is our duty, or that it is even expedient to confine ourselves to the twenty old standard drugs of our fathers, or of our brothers for all that, and to neglect or ignore everything else. Would such a course be conducive to longer life, or more likely to secure a favorable result in any given case of disease, whether indefinite in duration or self-limited? Take the familiar enteric fever as an example. Permit it to run its course without any attempt at aborting it, and how many drugs, either "old standard" or "new standard," will the patient's condition sometimes necessitate before the disease can be brought to a successful termination? Let us consider what may happen in any case of this disease. As initial phenomena we may observe the following: Headache, depression and muscular weakness.

*A paper prepared for reading before the Franklin Co., Ind., Med. Soc.

indisposition to exertion, aching in the back and limbs, chilliness, rigors, anorexia, and sometimes epistaxis. Individuals presenting such a clinical picture, have applied to me at different times for treatment, and I have been so foolish as to make a diagnosis of typhoid fever, and to frighten the patient and his friends with the belief that he is in for a four or six weeks siege at the best, when to my mortification and the patient's delight the entire assemblage of morbid phenomena passed away in less than a week, and convalescence proceeded without an interruption. There has usually been in these cases some considerable elevation of the temperature, often requiring the exhibition of quinine in full doses, after a blue pill or a few grains of hydrarg. cum. cret. to start up the secretions of the body (often requiring in conjunction salines, acetate of ammonia or others); diuretics, as sweet spirit nitre; anodynes, as opium, or its combination, the compound opium powder. Here we named five "old standard" remedies in a case which does not last beyond one week. Now suppose, as has often been witnessed, that the disease continues and is a pronounced type of typhoid fever. In the latter event before the end of the second week one will be called upon in many cases to prescribe for epistaxis, diarrhœa, tympanitis, or excessive pain and tenderness over the abdomen. For the first named you will prescribe, let us suppose, an "old standard" drug, viz., alum, about which we are probably as well informed as about anything in our materia medica. It may fail. It will fail quite frequently. Suppose you now try acetate of lead or sulphate of zinc. If the alum failed the latter two are more than likely to do the same. Tannic acid may be tried or the anterior and posterior nares may be plugged. Many good authorities esteem the saturation of the plug with Monsel's solution to be an efficient method of controlling the hemorrhage. Our list has now increased to ten, and we may not be through with this complication yet. The patient's blood may refuse to form a firm clot, and there is still more or less bleeding which defies the plug. It may come apparently from the unbroken surface of the mucous membrane, thus giving rise to an uncomfortable suspicion of purpura hæmorrhagica. What must be done? Shall our efforts cease? The patient's present condition, coupled with the threatening future probabilities and possibilities, make the loss of even a drop of blood a matter for serious consideration, and the continued exosmosis is of the gravest import. An attempt must be made to control it, or the inevitable consequence of seeing the patient succumb must be submitted to. The mineral acids are said by our fathers to be of great value in these cases. Our next act then is to give him, say the aromatic sulphuric acid, the most reliable of its class. It fails, and we try the tinctura ferri perchloridi, which is said to be almost a specific in many cases, and we will suppose that this agent effects the desired result, and we succeed in controlling the hæmorrhage. We are scarcely half way through the tedious course of the fever. Another week of this slow progress, with, perhaps, nothing of note to vary the monotony, excepting that gradual abolition of the vital powers denoted by such suggestive symptoms as a tendency to slip down toward the foot of the bed; bright hectic flush on the cheeks; a roving, bright, yet still somewhat vacant eye; subsultus tendinum; delusions and illusions; frightful dreams; insomnia, and all the signs of a progressive exhaustion of the entire resources of the patient. The tongue is either red and raw, dirty and loaded, or dark and covered with dry scales, indicating the profoundly prostrated condition of the nervous system and digestive organs, and we must give the patient some drug that will stimulate these organs to a better action, or he is, doubtless, lost. His heart is feeble and the pulse is fluttering—120 or upwards per minute. The temperature has sunk to from 100° in the morning to 101° or 102° in the afternoon, or it may remain stationary at about the degree first named. The laboratory of the body has not sufficient material left from which to evolve heat. First, brandy is given at regular interval and in stated quantities; in addition, the patient must have either nux vomica, strychnine, or compound tincture of cinchona to sustain the vital powers. He may have to take all these in succession. It may be, or it may not have been, absolutely necessary to administer chloral hydrate at night to quiet the patient and prevent his using up what little vital power is left him in vain tossing to and fro in his bed, as he has done earlier, or carrying on in his disordered imagination all the worry and weight of business or social cares. I say it becomes an absolute necessity. For the failing heart we must give, in addition to brandy, ammonia, either the carbonate or the aromatic spirit, the latter to be preferred.

It is also absolutely necessary that the patient be fed. But the tongue indicates the complete absence of any gastric juice capable of altering even the most easily-digested food. so we are under the moral necessity of adding to our list pepsine, and as pepsine acts more efficiently in an acid solution, we combine it with muriatic acid dil., thus increasing the number of essential drugs to eighteen. If opiates have failed to control the diarrhœa, we must combine therewith, or administer alone. some of the astringents. We will use the subnitrate bismuth. It has been seen to fail frequently. In case it should, we will give nitrate of silver. This will check the excessive discharges for twenty-four or forty-eight hours

when, in consequence of the patient having imbibed too much liquid, or without any assignable cause, it returns, and the last-named remedy does not succeed. Suppose we try catechu or hæmatoxylon. We have now exceeded the twenty "old standard" list, and are not through with the case by two weeks at the least, with abundant opportunity for a considerable number of complications, which will oblige us to exhibit some one drug, or other, standard or otherwise. We may require at least a half a dozen drugs that have not been named, and the condition of the patient may be such that no other can be substituted. What shall we do? Permit the patient to die because we have signed the creed of Nihilism in therapeutics? Not if one expects to continue in the practice of medicine, and to have patients call upon him for treatment.

I firmly believe that it is to the progressive therapeutist as well as to the laborious pathologist that we owe so much of the improvement found in modern methods of treating disease. And it is to the man, who, when all else has failed, casts about him for some untried remedy, which may save a life, or at least prolong a life and make it more endurable, and without which chroniclers would be compelled to enrich our statistical tables with the record of another death, that we look to lead us toward improvements in therapeutics.

What then is the proper course? Is it to try every humbug panacea advertised? Or is it to use a trained and discriminating judgement in making a choice of the agents to be used? Manifestly the latter. Certainly as a class the medical profession is not so mentally bankrupt as to be totally destitute of the power of discriminating between what is true and what is false in the great bulk of clinical testimony that is brought before their eyes year after year. Would the knowledge that these results were reached in a manner precisely similar to (except that herein are included incalculable advantages) that in which the old standard drugs were made what they are, assist in any way those who are inclined to be skeptical? If we are entitled to the affirmative answer, and it is humbly believed that we are, then may we not castaway any burdening, hindering dogma of non-progression, and rather than stand helplessly by the bedside of suffering humanity, and affirm "My list is exhausted; you must die." let us ransack the richly-stored departments of nature for worthy additions to our materia medica, assured that we shall see the average length of human life increased, and the average length of mortality statistics proportionately diminished. Lastly, but by no means least in the enumeration of benefits, the pocket will swell nearer to repletion with the much sought after "filthy lucre."

A large and important list of the "old standards" have been excluded from this enumeration as not being indicated in the hypothetical case described. But the human family, with its innumerable characteristics and idiosyncrasies, is affected by diseases whose manifestations are as diversified, and whose treatment must be almost as varied as the differences in individuals are numerous.

AN ANOMALY OF THE CORD.

BY J. A. WESSINGER, M. D., HOWELL, MICH.

On the evening of April 22, 1887, I was called to attend Mrs. S. S., in her sixth confinement. The labor was in all respects normal, child healthy and well developed. On delivering the placenta I found a condition of things I think sufficiently rare to warrant publication. The placenta was normal in size and general appearance, attached at the fundus uteri, and rather easily expelled. The umbilical cord was normal in appearance, twenty-six inches in length, and bifurcated. The bifurcation, in two distinct branches, began fourteen inches above the insertion of the navel, one branch being inserted at the right side of the placenta and the other at the left, with no intermediate ramifications to the placental structure. On close examination we found the umbilical vessels at the bifurcation very nicely branched, each "limb" of the cord containing its vein and accompanying arteries.

The mode of formation of such an anomaly is readily comprehended when we remember that all modifications of the cord "depend on the way in which the allantois contracts its adhesions with the point of the ovum in contact with the womb."

The placenta is always developed somewhere on the interior surface of the uterus, "and if the allantois happens to strike the chorion at a point somewhat removed from that which is in apposition with the internal uterine surface, the umbilical vessels must evidently have a tendency towards the latter, just as the roots of a plant always stretch towards the spot which will afford them the most nourishment."

Cases similar to the one reported above, although somewhat rare, have been recorded, and several obstetric authors* have made a quite extensive study of the subject. BENCKISER, in his thesis delivered before the French Academy,† gave a very learned view of numerous cases of this anomaly that had been brought to his notice. M. JULES COLQUET, of Brussels, has also written extensively on this subject.

*Robin, in Flint's Text Book of Physiology. Leishman, System of Midwifery. Landois, Human Physiology.

†Cazeaux & Tarnier, Obstetrics, Vol. I.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, March 21, 1887.

E. J. DOERING, M. D., President, in the chair.

OFFICIAL REPORT.

DR. JAMES I. TUCKER reported a case of

HERPES OMOBRACHIALIS.

This class of skin diseases belongs to the neurological group. J. P., aged 36, had for many years been an invalid. In his youth he had been sexually intemperate and had used liquor to excess. He was of a family every member of which had been afflicted with some form of nervous disorder. When he came under the author's care five years ago he was emaciated, anæmic and suffering from profuse diarrhœa. He had pursued the vocation of proof-reader until six months previous, when he broke down. His habits were and had been for some time past good in every respect. His principal trouble was a cough, of deep, sepulchral sound, which gave him no rest night or day. No mucus or other foreign matter was expectorated. On the 3rd of December there was a neuralgic pain in the right shoulder; on the next day an eruption appeared there, attended with an almost insufferable sense of heat. The vascular eruption was fully developed by the 9th, and occupied the shoulder and outward aspect of the arm, following the branch of the brachial plexus and terminating in an immense boil on the thumb. These vesicles passed through the various stages of vascular irritation, inflammation and resolution, and had entirely disappeared by December 15th. And more remarkable still, the chronic cough disappeared altogether. To relieve the pain and burning sensation I used hot fomentations and oleate of cocaine and ointment of glycerine. It was of no use to employ opiates, for although the patient was nervous and sleepless, morphia had no effect upon him. He took 240 grains of chloral hydrate of his own accord at a single dose, without any other effect than to make him slightly delirious. The question arises what may have been the relation between the cough and the eruption and why did the cough cease on the disappearance of the eruption?

DR. JOSEPH ZEISLER, in opening the discussion, thought cases of herpes zoster were comparatively rare here; in the last two years he had met with only one, affecting the fourth and fifth intercostal spaces of the right side. Although physiological and anatomical examinations have not yet proven the existence of true trophic fibres in the nerves, there can be no doubt that zoster must be considered as a trophoneurotic disease. The case was especially interesting from the possibility of syphilis being the disorder, and from the large area involved.

DR. TUCKER said that one point in reference to zoster, especially zoster frontalis, is that chronic bronchitis is sure to follow it, and life generally terminates in that way.

DR. CHARLES WARRINGTON EARLE asked if the author had not found that these cases almost always require the same tonic treatment that neuralgias do, viz., the exhibition of quinine and iron, and a good, generous diet, before a cure can be affected.

DR. TUCKER replied that all the patients he had seen suffering from the disease have been depleted, and certainly the remedies just mentioned would be needed.

DR. E. L. HOLMES reported a case of

CHANCRE OF THE EYELID.

Cases of chancre of the lids are of interest not so much on account of their rareness as of the difficulty in establishing a certain and early diagnosis, and the fact that suspicion even may not be awakened till quite late in the development. It is many years, probably twenty, since I have seen a case of primary specific sore on the genital organs. If I remember correctly what I formerly observed and what I learned from competent authorities, it is undoubtedly true that even an ulcer on the genital organs cannot always easily be diagnosticated. The swelling of the preauricular gland is quite often the result of simple abscess of the lids, especially if it is situated near the external angle. When, however, a circumscribed disease of the lids is accompanied by multiple preauricular and submaxillary glandular enlargement, suspicion becomes almost certainty. This has been the fact in four of the five cases which I have seen. In one case there was not sufficient swelling of the glands to attract either my attention or that of the patient.

Some months ago I mentioned in this Society the case of a laborer in a rolling mill who received a severe burn on the side of the body from a "flash" and on the left upper lid from a drop of the molten slag. This small round burn became infected from some source unknown to the patient, and after some time presented the appearance of a true chancre with glandular swellings and characteristic eruptions. No evidence of a lesion could be found on the genital organs. Every symptom disappeared under energetic mercurial treatment.

Very recently Mr. P. M., 45 years of age, married, also a workman in a rolling mill, received a "flash," a portion of which struck the left upper lid and inflicted quite a severe burn of the integument. The conjunctiva was also slightly burned. At the end of a week the patient came to me with the lids much swollen, red and tender, with a hard, dry, thin and red

ncrustation as one sees on a superficial abra-ion of the skin. The patient stated that ie had rubbed the lids several times dur-ng the week with the back of his hand, which vas more or less covered with grime and sand. He did this to relieve the irritation of the eye. There was nothing in the appearance of the ids or of the eye to excite my suspicion of any complication. For ten days I treated the eye vith mild lotions and ointments without the lightest benefit. On the appearance of pre-auricular and submaxillary swelling I referred he patient to DR. HYDE. I suspected the rue nature of the case, although there was till no trace of ulceration on the lid. PROF. HYDE could simply suspect, but preferred to delay definite opinion for a few days. In a veek or more the characteristic eruption ap-peared with increased severity of the local symptoms. Large doses of blue mass and odide of potassium relieved all the symptoms, ocal as well as general. The eye assumed its normal appearance in about three weeks.

DR. F. C HORR said that as the author vished the discussion to be conducted on the ine of experience of general practitioners, not specialists, he hardly felt that he was the right person to open it. As the author states, these primary syphilitic ulcerations, chancres of the eyelids, are of very rare occurrence, and in a ong experience of private and hospital practice n this country and Europe he could remember but one case coming under his observation of a primary syphilitic sore, and it was located on the conjunctival surface of the upper lid, a most curious place for the infection. A pa-tient came to him about two years ago with the id tender and very much swollen, and on turn-it he saw a large ulcer with all the typical ap-pearance of chancre of the prepuce. There was no doubt of its syphilitic character, but it puzzled him as to how the infection could have taken place there. On questioning the patient he learned that four or five weeks previously he got a little cinder or something in his eye and his room-mate turned the upper lid, saw the foreign substance and removed it with his tongue. Further questioning brought out the fact that this man was syphilitic.

DR. JOSEPH ZEISLER mentioned the possi-bility of contamination by kissing and by in-struments. The most peculiar cases of chancre in regard to the locality, had been related by DELOIR in his "Decours sur la Syphilis," some of which could only be explained by certain French habits.

DR. WILLIAM T. BELFIELD said, in reference to one point raised by DR. HOLMES, viz., infec-tion without ulceration, he thought it was a well-known fact that it has frequently occurred. There is nothing about syphilitic infection that implies ulceration. The morbid material is introduced into the skin and occasions a cer-tain amount of inflammation at the point of in-fection. Whether that results in ulceration depends upon the nutrition the parts receive; if they are well nourished there need be no ulcer, but as a rule some of the cells that are formed die and ulceration is the result. Occasionally the inflammation is so slight that neither ulceration nor even induration is produced locally; since syphilis is undeniably inoculated —in exceptional cases—without the production of any feature of the hard chancre. Nor is the syphilitic the only virus whose local effects are thus variable; thus, the virus of charbon, or "wool-sorters' disease" while usually produc-ing a malignant pustule at the point of inocula-tion, may be communicated without any local ulceration, indeed by simple inhalation.

DR. D. A. K. STEELE read a paper entitled

INTUSSUSCEPTION IN INFANTS.

Intussusception or invagination of the upper into the lower part of the intestine, embraces three layers of the bowel which include all the coats of the intestines. The diagnosis of intus-susception in an infant is usually an easy matter; a baby, previously in good health, is taken with sudden violent vomiting, with loud cries and evidence of abdominal pain and uneasiness occurring at frequent irregular intervals accom-panied with severe straining and the passage at first of fecal matter, then a mucus tinged with blood, and later of blood alone in consider-able quantities. Thirst, anxious expression and collapse are marked symptoms. A distinct sausage-shaped tumor can frequently be felt at the seat of the obstruction in the abdomen.

Treatment may be divided into medicinal, mechanical and operative. The medicinal plan is palliative but rarely curative.

The author described the details of the me-chanical plan of treatment as follows: Having clearly established a diagnosis of intussuscep-tion and previously given an opiate to quiet all peristalsis, I anæsthetize the child with chloro-form and then carry a rectal tube or large ca-theter about six inches within the anus. At-tached to this tube I have a flexible rubber tube two or three feet long attached to a small glass funnel. Into this funnel I pour alternate-ly solutions of soda bi carbonate and tartaric acid, thus generating carbonic acid gas and rapidly and safely inflating the large intestine. Three drachms of each will generate enough gas to completely distend the colon of a child. If this pressure is not sufficient to relieve the obstructions, I attach an ordinary double bulb syringe and inflate with air about as much as I think the bowel will stand, while the abdomen is being carefully manipulated by an assistant. I patiently, persistently and repeatedly em-ploy these measures, coupled with massage, abdominal taxis, inversion of child, etc., from twenty-four to forty-eight hours, when, if there

is no relief, I advise laparotomy. In case the obstruction is at the ileo-cæcal valve and is irreducible and an artificial anus cannot be readily formed, an ileo-colotony or implantation of the divided ileum above the obstruction into a slit-like orifice in the colon below the obstruction would be a justifiable procedure. SENN'S recent experiments on animals prove that it can be done with success. Several cases were reported which had been successfully treated by the mechanical method.

DR. C. W. EARLE, in opening the discussion, said that DR. STEELE had presented the symptoms of this terrible difficulty so fully that there is little more to be said. He was glad that the author dwelt upon the symptoms of constriction of part of the bowel, which is probably one of the chief causes for this accident. He must take issue with him in regard to the ease with which he diagnosticates some of these cases. DR. STEELE'S experience has been very different from his own when he is able to say that the diagnosis of intussusception in a child is made out without much difculty: In a number of cases he has seen there has been an absence of all the symptoms which the author has narrated. He remembered a case which occurred several years ago in an outside village, in which he made the post-mortem examination and found a very distinct intussusception. In that case we could get none of the symptoms DR. STEELE has spoken of; there was no tenesmus, no bloody discharge, no protrusion of the invaginated portion of the intestine, no sausage-shaped tumor of the abdomen, and yet the child had intussusception, probably from eating a large amount of cherries, as a number of cherry pits were found in the bowel at the autopsy.

As a medical man, it might be expected that he would oppose a surgical procedure, but the medical treatment of this difficulty is so absolutely hopeless that it seems to him if laparotomy offers anything at all we should be ready to accept any procedure the surgeons have to offer. However, the results of DR. STEELE'S process of treatment by inversion and shaking and filling the bowel, are really better than those of surgeons up to this time. It is a well-known fact that laparotomy for the relief of intussusception is followed by greater mortality than laparotomy for any other cause. But if the diagnosis is well made out, and particularly if the pulse is rapid and the child shows profound symptoms which point unmistakably to this difficulty, it seems to me we are hardly justified in waiting three days; he thought at the end of twenty-four hours we should cease to try the ordinary methods and proceed to do the operation.

DR. F. E. WAXHAM said he agreed with DR. EARLE in regard to the difficulty of making the diagnosis in cases of intussusception, especially in infants. In many cases he thought the diagnosis very difficult indeed, and sometimes a certain and absolute diagnosis is almost impossible. This is true for the reason that all the symptoms that have been enumerated as characteristic of the disease are not present in every case; the tumor is as frequently absent as present; if a small amount of intestine is involved in the intussusception it is impossible to detect it. Again, the bloody discharges are frequently absent, and the protrusion of the intestine from the anus, which is given as a prominent symptom, is often absent. Indeed, in many cases the incessant vomiting, obstinate constipation and the tenesmus are the only symptoms. He would refer to the differential diagnosis of intussusception; fecal impaction occasionally presents symptoms analogous to intussusception. Impaction is rare in infancy, but is more frequently observed in the adult and in the older children. It may give rise to a tumor, vomiting, tenesmus, tympanitis and even protrusion of the intestine from the anus. These symptoms closely resemble those of intussusception, but in impaction the vomiting is not usually as obstinate and large, copious enemas will cause the disappearance of the impaction. Again, in impaction we do not get the rapid and great prostration that is observed in intussusception. Cholera infantum may be mistaken for intussusception, for we have the same rapid and great prostration and collapse, we have the incessant vomiting, but in cholera infantum we have the large, copious watery passages instead of the obstinate constipation followed by the bloody discharges. Dysentery presents symptoms closely resembling those of intussusception in many cases; we have vomiting, tenesmus, frequent straining, bloody passages and not unfrequently protrusion of the intestine from the anus, but in dysentery the vomiting is not so obstinate nor the prostration so great. Typhlitis may present symptoms very closely resembling intussusception as the result of inflammation at the ileo-cæcal valve; we will have vomiting, intestinal pain, tympanitis, obstinate constipation which it is impossible oftentimes to overcome. The diagnosis in these cases is very difficult, and I know of one case of typhlitis where several surgeons thought seriously of operating for a suspected intussuception.

But in typhlitis the tumor, which results from inflammation and infiltration, is in the right side, while in intussusception the tumor when observed is in the left iliac region or in the transverse colon, for although the intussusception takes place at the ileo-cæcal valve, if the tumor is large enough to be observed the smaller intestine rolls in the larger until the tumor appears in the left side instead of the right. In typhilitis we have a history of acute inflammation: not so in case of intussusception.

Peritonitis will also frequently give rise to symptoms resembling those of intussusception; we have frequent vomiting, obstinate constipation, abdominal pain and tympanitis. He remembered a case that was treated for several days for intussusception, and not until the administration of morphia and lime water was the vomiting overcome and a correct diagnosis made. The vomiting could not have been relieved by medication in a case of intussusception. In peritonitis we usually have the gradual onset of the disease; more sudden in case of intussusception. In peritonitis we have the symptoms of acute inflammation existing for several days before we get symptoms of obstruction. In intussusception the symptoms of obstruction and shock appear early. In peritonitis, although the constipation is often obstinate, yet the vomiting is not so frequent and uncontrollable as in intussusception, nor do we have the rapid prostration in the former disease that is so characteristic of the latter. There are other forms of obstruction, such as the twisting of the intestine upon itself, pressure upon the intestine by a band of lymph, or strangulation of the intestine in a congenital opening in the diaphragm, any of which will give rise to symptoms exactly corresponding to intussusception.

In regard to the treatment little remains to be said. Not infrequently when an intussusception is suspected, the cases are treated with physic, castor oil, croton oil, or quicksilver, in order to prove the diagnosis. This treatment should be mentioned only to be condemned. No remedies should be given that will increase the peristaltic contraction, but opiates given to prevent it. Quicksilver may be used with benefit in those cases where the invagination is low down in the bowel, or where the intussusception is of such extent that it reaches into the lower bowel, or perhaps near the anus. In such cases the child should be inverted and the quicksilver used per rectum, and the pressure and weight of the quicksilver will assist greatly in the restoration of the invaginated mass. He fully agreed in the recommendation of laparotomy in cases where mechanical measures fail. When we have faithfully but unsuccessfully tried medicinal and mechanical measures, he thought we should resort to laparotomy, providing a positive diagnosis can be made, and we should not delay too long, for the longer the operation is delayed the less the chances are of recovery.

Dr. A. E. Hoadley wished to make one suggestion as to the surgical treatment of these cases. The author, on going into the surgical treatment thoroughly, had left the idea, he thought, that about all that can be done for cases of acute invagination of the intestine is to unfold the invaginated intestine, and if this cannot be done, it must be excised and an artificial anus made. Of course it does not advise the resection of the invagination, but advises an artificial anus as a temporary means. Now where this invagination is acute it obstructs the lumen of the intestine, and all the urgent symptoms are consequent on the obstruction of the bowels, not that the tissues are liable to ulceration or sloughing provided that the tension above the invagination is promptly relieved. If the tension above the stricture is relieved the tissues at the stricture can take care of themselves, the strangulation will be immediately relieved in a measure, so that the circulation can be carried on at the seat of invagination. Relief of tension controls peristalsis and no further invagination will take place; congestion will be relieved and the tissues saved. There has been an operation suggested for that purpose which is applicable in all cases where to unfold the invagination is more dangerous than to leave it alone or excise and and establish an artificial anus. The operation is to bring that portion of bowel above the invagination to that immediately below and there make an opening in each, stitch the openings together, and thus form an outlet for the distended intestine above. In case the invaginated portion loses its vitality there is no objection to its sloughing, as the slough can readily pass down, as the gut is not closed above. In his own practice he had seen two cases of recovery from intussusception, in which there was no doubt about the diagnosis; in one case a sausage-shaped tumor could be felt across the median line, with all the acute symptoms except, perhaps, the bloody discharges. The invaginations in these cases were of the colon, and not ileo-cæcal, and the lumen of the gut was not completely closed. There was no particular distension, but there was a large and painful tumor, with tenesmus and diarrhœa. In one case, in which the diagnosis was confirmed by several physicians, the tumor remained for more than a year, and at any time, if pressure was made over it, there would be tenesmus of the bowel, yet the child who is now eight years old, has fully recovered. He has a patient now under treatment in whom two and a half months ago there was probably intussusception of the colon. A painful tumor presented on the left side which could be plainly felt from day to day, associated with all the irritable symptoms of the bowels, but the invagination does not occlude the lumen of the bowel, therefore the most distressing symptoms were absent. This tumor has gradually grown smaller, less tender, less painful, and the child is now about free from the irritation caused by that invagination.

Dr. J. Frank asked if, when the invagination is situated above the ileo-cæcal valve, water injected would pass the valve itself? He hardly thought the small amounts the author speaks of having injected would have

reduced the invagination. He was not opposed to giving cathartics in cases where they might do good, and thought sometimes they do not do as much harm as an operation. The intestines are held up by mesenteries, and if the principal part of the intestine cannot invaginate itself where it is held fast it cannot come down. A cathartic which produces a peristalsis is always towards the rectum, and if the part is held up by the mesentery, the peristaltic motion will not bring it down any further, and yet will relieve the intussusception. He thought many cases are cured by cathartics. He had a case some time ago where the child was pulseless and cold, the eyes turned in the sockets, and there was tenesmus and vomiting. After trying nearly everything an enormous dose of calomel was given, and as soon as there was a movement of the bowels the child was all right.

DR. J. E. COLBURN said that some years ago he had an interesting case; in the early morning he was called to see a child whom he found breathing with great difficulty and presenting many symptoms of acute bronchitis. He listened carefully and thought he located the region of the disturbance. Leaving some remedies he went away, promising to call late in the afternoon. During his absence the family became alarmed at a change of symptoms, and called in another physician, who assured them that he was mistaken; that the child had acute gastritis. When he went back in the evening the child was purging and passing blood. He made an examination and found a tumor corresponding to the tumor described to-night. He gave a grave prognosis, left directions for the use of some remedies, and promised to see in the morning if it was still alive. The next morning when he called the mother told him the child was better, and showed him a chicken's foot and leg that it had swallowed.

DR. EARLE asked DR. STEELE to give the statistics in regard to the use of chloroform and ether with children.

DR. STEELE, in closing the discussion, said, in regard to DR. EARLE'S query as to the ease of making the diagnosis: I would say that the diagnosis is not always an easy matter, and I do not wish to convey that impression. In the first case I reported the diagnosis was easy, because the case presented symptoms laid down in the books as nearly as could be: there was vomiting, tenesmus, bloody stools, absolute constipation and a sausage-shaped tumor—but that is the only case of the four reported in which we had all the symptoms; in two there were no tumors at all, in one the tumor was indistinct and irregular in outline. There was no pain in that case. In none of the cases was the diagnosis verified in a *post-mortem*. There is an element of doubt as regards the diagnosis, but it had been formed in each case after careful examination by competent physicians, and was considered fairly certain. In regard to the relative safety of ether and chloroform in children, I cannot give the statistics, but the administration of chloroform to children is a very safe procedure as compared with its administration to adults. In regard to the differential diagnosis, DR. WAXHAM presented all the points very fully. In a paper of this character I did not wish to go into that subject. In regard to the operation of cutting the bowel above and below the point of obstruction, that I alluded to as an operation having been done experimentally on animals, with success, by DR. SENN, of Milwaukee. So far as I know there are no statistics showing that it has been done on man. The case of obstruction occurring in a child, with painful tumor, spoken of by DR. HOADLEY, was a case of chronic obstruction in which the lumen was not perfectly occluded, and those cases are not dangerous. So long as the lumen is not absolutely interfered with the processes of nutrition go on. Cases of chronic obstruction were not considered in the paper; I spoke only of acute obstruction due to intussusception. Water passes the ileo-cæcal valve by dilatation from over-distension. I have seen the experiment tried on animals; by opening the abdomen and forcibly injecting water the colon would become distended to its utmost capacity, and by-and-by the tissues would begin to yield, the valve would become incompetent and the water would pass. The quantity of water used for injections was smaller than if the obstruction had been higher up. The case of acute obstruction mentioned by DR. FRANK, that was relieved by a large dose of calomel, was probably acute enteritis, such a case as would have been relieved by bleeding, many years ago. When we are called to these cases of acute intestinal obstruction where there is a doubt as to its cause, we should take into consideration all the factors: the age of the child, the sex, the suddenness of the onset, the presence of a majority of symptoms that are said to be present in intussusception, and then make a thorough, complete and systematic palpation of the abdomen, aided, if necessary, by the distension of the colon with carbonic acid gas. By the alternate injection of an acid and alkaline solution into the rectum you can distend the colon so that it can be mapped out perfectly, and you can determine the location of the obstruction.

DR. ELBERT WING exhibited some pathological specimens, and said: These specimens were obtained at the County Hospital to-day and I bring them to you to-night, because specimens are more interesting when they are fresh. The case came to the dead-house without any history except that the man was known to have some trouble with his heart. The interns were careless and no careful record was

kept. The man was about 60 years old and very fat. There was no fluid in the abdominal cavity. The pericardium contained perhaps 30 cu. cm. of clear serous fluid, and the heart was considerably larger than the man's fist, with one or two of the so-called "milk spots" on the surface. The right auricle was distended with dark, partly clotted blood, the right ventricle contained a very small quantity of fluid blood and a small clot; the left auricle and ventricle were empty. Upon section the heart showed no lesion of the valves; there was slight atheroma at the base of the aorta. The endocardium showed the streaks and bands of grayish discoloration which are taken as evidence of chronic endocarditis; there was also, over the surface of the endocardium, the mottled appearance of myocarditis with fatty degeneration. The left pleural cavity was empty and without adheisons. The surface of the lung presented a few spots of emphysema, and upon section the bronchial tubes were found extremely congested and lined with a thick coat of mucus throughout the bronchial tree. On the right side there was an adhesion along the median line, and on breaking this found 3700 cu. cm. of a clear serous fluid, slightly reddish, containing no shreds and no placques of fibrin. The entire costal pleura of this side was much thickened, of a slightly velvety appearance and bright red color, easily torn in manipulation. The deposit of fibrin could be removed only by considerable force, and the pleural surface then showed manifold small red dots, resembling the mouths of several capillaries. Completely covering the surface of the right lung there was a film of lymph which varied in thickness from that of a heavy sheet of blotting-paper to one or two millimetres. Over the lower lobe this had taken on organization and contained bands of connective tissue.

DR. WILLIAM T. BELFIELD read a paper on

DIGITAL EXPLORATION OF THE KIDNEY, WITH REPORT OF THREE CASES.

Of some 250 cases of nephrectomy heretofore reported, about 44 per cent have died from the effects of the operation. The chief causes of death have been:

1. Shock (42 per cent. of the fatal cases).
2. Uræmia (14 per cent.).
3. Peritonitis (21 per cent.).

These three factors were thus responsible for 77 per cent. of all deaths. Improvement in the results of renal surgery seems, therefore, to require means for the avoidance of these three great dangers.

The chances of fatal shock are decreased by early operation, before the patient is exhausted and the damage to kidney tissue extensive through long illness. This self-evident proposition is illustrated by the fact that, while about 18 per cent. of all (250) nephrectomies have died of shock, yet of 24 nephrectomies of fairly healthy kidneys removed for wounds of loin, ureter, for mobility, etc., not a single death occurred from shock.

The greatest obstacle to early surgical treatment of renal diseases has been *faulty diagnosis*. Such cases are usually treated as lumbago, sciatica, hip-joint disease, and (especially) cystitis, for a long time before the true seat of the lesion is detected or even suspected. Since it is not always remembered that pyelitis produces symptoms identical with those commonly ascribed to cystitis, the former is not suspected, and a diagnosis of cystitis is made; and as cystitis is still too generally regarded as an entity, a disease instead of a mere symptom requiring explanation—the patient is treated for "chronic cystitis." Finally, months or years later, a lumbar swelling or other symptom reveals the real origin of the difficulty. Meanwhile the patient has become so enfeebled that he succumbs to the shock of an operation that could have been safely borne at an earlier period. Early exploration of the kidney—a comparatively slight operation—has, by drainage of the pelvis, in many cases relieved a difficulty which at a later stage would have required nephrectomy, a formidable operation; moreover, a preliminary drainage has been shown to be a valuable factor in diminishing mortality from nephrectomy. Thus, of 73 nephrectomies for suppurative lesions collected by GROSS, 12 were made after previous exploration of the kidney, with but one death; of the remaining 61—without previous nephrotomy—31 died.

Uræmia rarely occurs after any renal operation provided the second kidney be present and in healthy condition. While commonly associated with nephrectomy, one of the annexed cases shows that uræmia may be inevitable after simple nephrotomy; hence a necessary preliminary to any renal operation should be an attempt to ascertain the functional condition of the opposite kidney. In the female this can often be accomplished by cauterizing the ureter, after Pawlik's method; in the male probably the best, though still an uncertain, means is Silbermann's instrument for compressing one ureter. (Instrument shown.) The statement that the abdominal incision, by permitting digital examination of the opposite kidney, obviates the dangers of uræmia, is fallacious; for in many cases kidneys which are indistinguishable by the finger, or even by the eye, from normal organs, are extensively invaded by disease—inflammatory, tuberculous or calculous. The pair of kidneys exhibited by DR. STEELE this evening are signal examples—normal in size, contour and consistence, yet each extensively tuberculous. Palpation through an abdominal incision could

have detected nothing abnormal in either of these kidneys.

The following cases illustrate several of the principles above enunciated:

S. M., widow, 26 years old, delicate since childhood; has had dyspepsia for years; for a year past has suffered from headache, pain in back and left thigh; menstrual intervals shortened to two or three weeks. Was variously treated for lumbago, sciatica, and ovarian disease. In March, 1886, urination was unduly frequent and sometimes painful; urine contained pus and blood; was treated for cystitis.

On admission is emaciated and feeble; urination every half hour or oftener, painful; has frequent pain in lumbar region, often shooting down to left thigh; requires morphine constantly. Urine acid, depositing blood, pus, and occasional rosettes of large uric acid crystals. Throughout the extent of the visceral layer of the pleura it could be removed, leaving the surface smooth and glistening. The lung on the cut surfaces is of a steel-gray mottled with spots of pigment discoloration. It is completely devoid of air, and a piece cut out from it and thrown into the water sinks. Upon the superior border of the spleen there is a small placque in which the connective tissue of the capsule is largely increased. The cut surface of the organ presents a mahogany color and as a whole is quite firm, verifying the diagnosis of what we would expect to find in such cases, chronic passive hyperæmia of the spleen causing an increase of the connective tissue. The kidneys were hardly enlarged at all, the capsule was not thickened and was easily removed. Upon section the cut surfaces of each of the organs was a very dark red color, the vessels all full of dark-colored blood, and the organs slightly firmer than normal. The left lobe of the liver presents a peculiar appearance. It looks and feels a little granular, and that seems to be due to a wrinkling of the capsule. There was a similar appearance along the anterior border, and near the line of the suspensory ligament. This large spot was triangular upon the surface, say 5 cm. along each side, and extended into the organ in a pyramidal shape, the apex being near the hylus of the organ. The line of demarcation between this wrinkled, and the unchanged surface of the organ is sharply defined. On section these portions of the organ present the characteristic appearance of advanced simple atrophy, a dark brown slate-color, the lobule distinct but very much diminished in size. That portion of the organ not described is in the condition known as "nutmeg liver." The omentum is in a condition rarely seen. It is 25×12×1.5 cm., somewhat lobulated, and along the anterior surface there are broad radiating bands of fibrous tissue. The organ as a whole is very firm and solid, and on section little lobules of fatty tissue can be isolated. The condition is that of marked hypertrophy of the fatty tissue of the organ, together with a great increase of the connective tissue, the latter due to chronic passive hyperæmia, the former part of the general marked increase of adipose tissue throughout the body. There was also considerable œdema of the right leg, but no thrombosis in the iliac vein. Examination of the veins outside of the abdominal cavities not permitted. With the conditions described as a basis, the diagnosis is: chronic endo-myocarditis with fatty degeneration; chronic pleuritis (costal) with effusion, atalectasis from compression, right side; chronic passive hyperæmia of spleen, kidneys and liver, with added circumscribed simple atrophy of the latter; hypertrophy and chronic passive hyperæmia of the omentum; chronic venous thrombosis with œdema of the right leg.

Diagnosis, calculous pyelitis, probably limited to left side; right ureter catheterized and urine appeared normal.

November 29, 1886, kidney was exposed and pelvis explored; mucous membrane rough and ulcerated, clots of pus evacuated; wound in kidney packed with gauze.

Except for persistent vomiting for a few days, recovery was without notable incident. The renal fistula was closed on the twenty-first day; patient has since been free from all her former symptoms and is regaining flesh and strength.

G. F., 30 years old, was knocked down by a cable car November 28, receiving a lacerated wound of the right hand and various contusions The hand was dressed, and patient presented no notable symptoms until December 11, when after straining at stool he passed a large quantity of blood with the urine and had severe pain and tenderness over the right kidney, with some temperature: these symptoms persisted in spite of rest, ergot, gallic acid and opium; the right loin while not swollen, felt boggy.

December 22, the patient having experienced several irregular chills and sweats during the previous day, a lumbar incision was made down to the right kidney. The peri-renal tissues were found closely adherent, extravasated blood was seen under the capsule and a rent one and a quarter inches long was found in the posterior surface of the kidney extending into the pelvis; about half an ounce of a watery fluid lay behind the kidney. A large drainage tube was inserted. The temperature remained high for several days, after which recovery rapidly ensued, and January 14 the patient was discharged well; the wound entirely healed.

C. L., 48 years old, farmer, began some two and a half years ago to suffer from slight pain and stiffness in the loins; later, pus appeared in the urine; was treated for Bright's disease.

About a year ago urination became frequent and sometimes painful, was supposed to have cystitis. Has lost flesh; his rest has been much disturbed by frequent calls to urinate. Six months ago he passed two small calculi after some renal colic on left side; since that time has had slight colic on left side several times, followed by expulsion of clumps of pus but no calculi.

Diagnosis, tuberculous or calculous pyelitis, probably former; bacilli were found in one examination of pus, and the lower organs were normal.

Exploration, January 26. The kidney (left) was considerably enlarged: no calculus could be detected with finger or needle. Incision through kidney showed the pelvis considerably dilated, its orifice narrowed by a thickening of upper part of ureter; mucous membrane ulcerated in several places; the pyelitis evidently tuberculous.

Nothing of note occurred until the fifth day, when the urine became scanty and tinged with blood; soon the usual evidences of uræmia became manifest, and death ensued from this cause on the eleventh day. A partial autopsy showed that the right kidney was extensively, the left slightly tuberculous; bladder and prostate normal. Evidently the right kidney, which had never caused pain, had been first diseased; the function of the left, which had latterly been performing most of the renal excretion, had been arrested not by the slight incision, but by the congestion which followed the removal of the accustomed pressure in the dilated pelvis. Similarly uræmia has followed the sudden evacuation of a habitually distended bladder.

To summarize: 1. Surgical affections of the kidney and its pelvis are frequently masked under symptoms of cystitis, lumbago, hip-joint diseases, etc.

2. Digital exploration of the kidney and its pelvis often affords the only available means for accurate diagnosis in the early stages.

3. When made with due precautions, this operation is almost devoid of danger; while saving the kidney it may accomplish all that a dangerous nephrectomy could offer at a later stage; and if it fails to cure, it materially increases the chances of recovery from a subsequent nephrectomy.

4. An investigation into the functional condition of the opposite kidney should precede an exploratory incision into the pelvis.

Some one, who was evidently suffering from a disordered liver, has defined medicine as the art or science of amusing a sick man with frivolous speculations about his disorder, and of temporizing ingeniously till nature either kills or cures him.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., MAY 10, 1887.

Editorial.

TREATMENT OF CROUPOUS PNEUMONIA.

The search for an illustration of the proposition that medicine is an inexact science, could, probably, find nothing more apposite than the variety which would appear in the treatment of pneumonia were a dozen physicians, of equal prominence in their profession, each independently of the others, to prescribe for a given case. This variety would amount in many instances to a positive diversity, and the antagonism of views on therapeutics would be encouraged by the dicta of the authorities on the pathological conditions which obtain in the disease. Years ago, for instance, croupous pneumonia was held to be a simple inflammation of the lung parenchyma, as distinct from that of the mucous lining of the bronchi and its development into catarrhal pneumonia. With many this view of its nature still obtains, but the more advanced regard it as a constitutional affection, with the local manifestation in the lung, even as typhoid fever is a constitutional disease with ulceration of Peyer's patches as its peculiar local lesion. Among the still further "advanced" pneumonia is a disease due to the entrance into the system of a specific bacillus, which multiplies to a fixed limit in its new habitat and then sickens and dies—in other words that the disease is specific, contagious and self-limited.

The treatment of pneumonia, when not empirically conducted, is determined by the one of the three views which the practitioner may chance to entertain. Thus, we have the antiphlogistic treatment, formerly with its blood-letting, but of later years with its tartar emetic, corrosive sublimate and cathartics. This was formerly followed out to the letter, the idea being that the danger to life lay in the inflammation and this it was incumbent on the physician to allay at all hazards. The result was that in the anxiety to cure the disease the patient himself was lost sight of, and the mortality was consequently very great. An enlightened pathology was the dawn of a more satisfactory therapeusis. With it came in the con-

viction that attention to the patient was of as great, if not greater, importance than the care of the disease. The patient was then nourished and stimulated, and thus fitted to wage the battle against the enemy which had laid siege to his vitality. The system as a whole, and not the local lesion alone, occupied the attention of the physician. The benefit of this conception of the disease became manifest in the much more successful outcome of treatment.

Latterly it has been claimed by the therapeutic nihilists, (who seem to be a peculiar outcome of the study of such things in medicine as are "exact,") that the good results of the latter method of treating pneumonia are imaginary rather than real; and that equally good results would attend the expectant method of treating the disease, which is self-limited and must run its course in spite of treatment. It is unfortunate that such views are backed by men whom the profession has learned to honor for such of their contributions as are of true value. They are inherently pernicious, and when supported by such authority they become dangerous in the extreme. The profession is not, however, bound hand and foot to the authorities, and the method of watching the storm without doing something to prevent its ravages, has not met with general favor.

Unquestionably many cases of croupous pneumonia would recover without treatment, but the careful practitioner would scarcely feel himself justified in trying the experiment of simply watching a case with a view to studying its natural course. There is, moreover, no plan of treatment which may be slavishly followed in any given case, although it will become the practitioner to entertain some definite conception of a general plan. Fortunately venesection has fallen into "innocuous desuetude," and yet cases occasionally, though very rarely, present in which it is indicated. As a rule, however, where there exists the least doubt as to the advisability it is best not to bleed. The cases in which it is justifiable are of a sthenic type, occurring in the young and very robust and plethoric. Cardiac sedatives and depressants such as tartar emetic and veratrum viride should be used with extreme caution, and then only early in the disease, to be suspended as soon as their physiological action has appeared, and should never be given after pneumonic infiltration has been completed. Heart-failure is the direct cause of death in the vast majority of cases, and it behooves the physician to be on the alert for signs of the invasion of this condition. Cardiac sedatives are permissible only with a view to preventing the sedation which is apt to follow excessive excitement. In few diseases is the good judgment of the physician productive of such good results, as in the employment of cardiac sedatives in croupous pneumonia.

The second danger in pneumonia is from excessive temperature. The means employed for the reduction of this have been various, but cold water and quinine are the two which have found most favor. This heat is due to one or both of two causes, viz., rapid tissue-metamorphosis and suppressed radiation. To check the former, quinine is the most valuable agent of the materia medica with which we are as yet familiar, and to withdraw from the system an excess of heat stored therein through inability for it to escape, the cold bath is the most valuable means at our disposal. These remedies require to be used with circumspection. Quinine to reduce temperature must be given in large doses. To exhibit two grains every two hours would be to exaggerate rather than alleviate this symptom. From twenty to forty grains, according to the urgency of the case, must be given within that time. From five to ten grains should be given every half hour until the prescribed amount has been taken. Usually the quantity mentioned will, within a few hours after its exhibition in the manner suggested, be followed by a lowering of the temperature, which will go on for about twelve hours, when it will remain stationary for from ten to twenty hours. The quinine should not be again given until the temperature has reached 105°. Quinine thus given, especially early in the disease, has, doubtless, also another action of much importance, namely its influence in checking the amœboid movements of the white blood-corpuscles, and thus preventing their diapedesis. We believe it is thus capable, when given sufficiently early in the disease, to abort the attack in a sufficient percentage of cases to warrant its systematic exhibition with this end in view.

Cold-water baths are very grateful to the patient with high pneumonic fever and should not be denied him. As soon as the temperature reaches 104° the patient should be placed in a full length bath with a temperature of 80°, which should be gradually lowered, by the addition of cold water, to about 65°. He should be kept in the bath until the temperature, as taken in the rectum, has reached 102° It is a mistake to keep him until the normal temperature has been reached, as the lowering goes on for a considerable time after removal from the bath. While in the bath the patient's head should be kept cool by applications of ice water.

Latterly antipyrine has been reported as quite a successful agent in lowering temperature, and it has been given in pneumonia with good results. The evidence is, however, not sufficient as yet to warrant its substitution for quinine. It is a cardiac depressant and for

this reason should be employed with great caution.

A device which we have employed with great comfort to the patient is the rubber tube through which he is enabled to breathe the out-door air. The cold air thus introduced into the lungs is very grateful and assists materially in maintaining the reduction of temperature effected by the quinine or bath.

Opium is a valuable drug in the treatment of pneumonia, but one which demands great care in its exhibition. It is beneficial both in so far as it relieves the pleuritic stitch and in so far as "it places the lungs in a splint," thus meeting one of the indications in the treatment of all inflammations, viz., rest. By its action on the respiratory centre it lessens the frequency of the respiratory movements, and thus, when judiciously given, is beneficial.

Alcohol is indispensable in the treatment of pneumonia, when the heart begins to show signs of fatigue. But powerful as it is for good it is equally powerful for evil. It should not be given indiscriminately, or as a matter of routine. The pulse should be carefully watched, and when it becomes frequent, feeble, irregular or intermittent, alcohol should be given in careful doses—small at first and its effect carefully noted.

The above outline while, embracing the salient points in the treatment of croupous pneumonia, by no means covers all that is necessary to be done in a given case. The trite saying that there is a patient rather than a disease to cure is peculiarly applicable here, and the educated and careful physician will be constantly on the alert for complications, and prepared to meet them as they arise.

SALOL, THE NEW REMEDY FOR RHEUMATISM.

Another drug has been added to the long list of those which are set down as "cures" for rheumatism. It is a white crystalline powder with the odor of the oil of wintergreen (the salicylate of methyl) and is known as "salol" or the salicylate of phenol. It was first produced by PROFESSOR NEUCKI, of Berne, last year, and first employed as a therapeutic agent by DR. SAHLI, of the same place, who reported very flattering results from its use in acute rheumatism. His claims have been tested by a number of experimenters, and the result warrants the claim that the salt is at least equally effective with the salicylate of sodium, while it possesses an advantage over the latter on the score of palatability. Being insoluble in water salol is tasteless. It is claimed for it, also that it passes through the stomach undissolved, and is broken up in the duodenum, through contact with the pancreatic juice, into salicylic acid and phenol. The irritating and nauseating action of salicylate of sodium on the stomach is thus also obviated. It would seem that the action of the salt is due to its salicylic acid, which is set free at a part of the intestinal canal where its irritant action is not disagreeable.

Beneficial effects are also being reported from the use of the drug in other affections, and particularly in such as demand the exhibition of an antiseptic, as, for instance, in catarrh of the bladder and pyelitis. Administered in the latter affections the urine loses its alkaline reaction and becomes normally acid. The dose of the salol is about the same as that of salicylate of sodium—10 to 30 grains every two or three hours. It is best administered in capsules.

Notes.

The newspapers give prominence to a dispute between DR. MARION SIMS and NAT. GOODWIN, the husband of the late ELIZA WEATHERSBY, the actress. Payment is refused on the old ground that "the treatment did no good. DR. SIMS was called in consultation by the attending physician, DR. T. S. ROBERTSON, who was in doubt as to the nature of an abdominal tumor, from which his patient suffered. The result of the consultation, that an operation afforded the only hope of cure, being communicated to the patient, she earnestly requested its performance. The outcome being fatal, the husband claims that the operation was nothing less than scientific murder. Thus, it appears, human nature is pretty much the same in all classes and conditions of men. Cupidity and the human characteristic of loving to lay the blame on the doctor, are among the things which are calculated to make the profession tired.

The editor of the Atlanta Medical and Surgical Journal is either a happy man or a satirical one. If a happy one we venture to say his experience is unique: "Probably," he says, "in the whole range of human experience there is no phase of existence which involves so much unalloyed happiness as that of the editor of a medical journal. So many immunities and privileges are incident to this department of human effort that the happy incumbent may be said to be raised above the plane of ordinary human existence and to dwell in a paradise of his own."

DR. HENRY LEFFMANN, editor of the Polyclinic (P. O. Box 791, Philadelphia), desires to obtain results of the new treatment of pulmonary consumption and phthisis by gaseous enemata, for publication in the Polyclinic. The correct therapeutic value of this method can

only be arrived at by the collection of statistics, and he therefore requests any one who has administered the gas to communicate the result to him, the formula used, and any special information that may be useful.

A cynical correspondent, in critizing the sulphuretted-hydrogen treatment of phthisis, urges that all apparatuses for generating the gas are quite superfluous. He suggests that some device for sealing the anus is all that is necessary, by way of apparatus. With this securely applied, the bowels could be thoroughly charged by a liberal administration of Boston baked beans, *per os*.

The Michigan State Medical Society convenes at Lansing on the 12th inst., and will continue in session two days. The programme is said to be replete with interesting papers, and ample provision has been made for social entertainment. The Hon. O. W. Barnes and wife will give a reception to the members. It is hoped that there will be a full attendance.

Therapeutic Brevities.

For Falling Hair and Dandruff.—The following is another of the formulæ recommended as a hair tonic:

℞	Borax,	15 parts.
	Glycerin,	30 "
	Decoction soap bark,	50 "
	Bay rum,	10 "
	Water,	105 "

M.

Apply at bed-time with friction of scalp with a moderately hard brush. In the morning the following pomade:

℞	Tannin,	2 parts.
	Tr. cantharides,	5 "
	Balsam Peru,	5 "
	Exp. oil of mace,	3 "
	Vaseline,	50 "
	Essence of lemon and	

M. Oil of bergamot to taste.

Dissolve by gentle heat the vaseline and expressed oil of mace, and mix with the tannin, tincture and balsam of Peru.

For Diphtheria.—

℞ Sodii benzoatis, ʒ i.
Potassii chloratis, ʒ ii.
Potassii bromidi, gr. xv.
Glycerini, ℥ i.
Aq. destillatam, q. s. ad ℥ iv.

M. Sig. A teaspoonful every hour.

The treatment should be preceded by an emetic, and accompanied by carbolic inhalations and the constant application of a saturated solution of benzoate of sodium around the throat. This method is said to be popular in the hospitals of Buenos Ayres.

A General Tonic.—The following is recommended by Fothergill:

℞ Quininæ sulph., gr. xvi.
Strychninæ sulph., gr. ss.
Potassii citratis, ʒ iss.
Tr. ferri. chloridi, ʒ v.
Syrup, ℥ i.
Aquam, q. s. ad ℥ iv.

M. Sig. A teaspoonful three or four times a day.

To Relieve Pain of Cancer of Stomach.—Germain Sée's formula for the relief of pain after taking food in cancer of the stomach:

℞ Tr. conii,
Tr. hyoscyami,
Ol. anisi, ää ʒ ii.
Tr. gentianæ, ʒ i.

M. Sig. Ten to thirty drops after each meal.

For Itching Piles.—The Chicago Medical Times vouches for the efficiency of the following application in itching piles:

℞ Tr. capsicum, ʒ i.
Spts. turpentine, ʒ ii.
Spts. camphor,
Decolorized iodine, ää ʒ iii.

M.

Epilepsy.—Dr. N. S. Davis recommends:

℞ Potassii bromidi, ʒ vj.
Tinct. digitalis, ʒ vj.
Ext. galium alba, ℥ iij.
Elix. simp., ℥ ij.

M. Sig.—Teaspoonful before breakfast and before supper, and two teaspoonfuls at bedtime.

Cardiac Dropsy.—

℞ Tinct. digitalis, ʒ iss.
Tinct. belladonnæ, ʒ ss.
Lithii bromidi, ʒ j.
Liq. potassii citratis, ℥ jss.

M. Sig.—Teaspoonful in water four times a day.

Medical Progress.

THYMOL IN THE TREATMENT OF ATROPHIC NASAL CATARRH.—The great difficulty in curing or even permanently improving atrophic nasal catarrh is but too well known to laryngologists, and any agent which promises somewhat better results than those ordinarily obtained deserves the closest study.

Some eighteen months ago I began a series of experiments with thymol, being led to think that it might be of value in nasal diseases from observing its effects when used as a dressing on some general surgical cases. After prolonged and careful trial, the following four standard solutions have been adopted: No. 1. thymol gr. ss; alcoholis f℥ss; glycerin f℥ss; aq. dest. q. s ad. f℥j. M. No. 2. thymol gr. ss; alcoholis f℥jss; glycerin f℥ss; aq. dest. q. s. ad. f℥j. M. No. 3. thymol gr. v; alcoholis, glycerin ää f℥ss; and No. 4. just twice the thymol strength of No. 3. Nos. 1 and 2 have been used in the atomizer. Nos. 3 and 4 are applied by means of a tuft of absorbent cotton on the cotton carrier.

In early cases of atrophic rhinitis where the epithelium is still intact, and the accumulation of discharge is not great—which are characterized by atrophy of the turbinated erectile bodies, with consequent enlargement of the nasal chambers, and by a peculiar shining red hue of the mucous membrane—the No. 1 solution has been used with the most satisfactory results. This form of atrophic catarrh is invariably preceded by the hypertrophic process, and its pathology is briefly described as being a degeneration from pressure and loss of blood supply; the new-formed fibrous tissue of the advanced hypertrophic rhinitis pressing upon the glands and nutrient bloodvessels, and so causing atrophy. This disease may exist side by side with the hypertrophic variety: I have never found either large abrasions (shedding of epithelium) or an offensive odor in these cases. Under the thymol treatment used two or three times per week, the nasal secretion becomes more liquid, the mucous membrane regains its normal pink color, and, from the peculiar stimulation of nutrition, the turbinated bodies increase is size, so narrowing the nasal cavities to nearly their normal lumen, and in connection with tonic treatment and careful cleansing of the nasal chambers, the disease has been finally very greatly improved in from three to nine months, in these but slightly advanced cases.

In what I am accustomed to consider *typical* cases of atrophic rhinitis, the following conditions will be found: The patient complains of great, often almost choking dryness in the throat, and of accumulation of mucous crusts, particularly in the vault of the pharynx: loss of the sense of smell: and an intolerable sickening odor may or may not be present in greater or less degree. On inspection the mucous membrane is found to be dry and shining, the turbinated bodies nearly or entirely destroyed by atrophy, and erosions (stripping off of epithelium) may occupy nearly the entire mucous membrane. The nasal chambers are greatly enlarged, so that the pharngeal wall can be plainly seen by anterior rhinoscopy. The surface of the turbinated bodies is rough and irregular from unequal degeneration, and intense congestion from crust irritation is generally present. By posterior rhinoscopy the pharyngeal glandular tissue is found to be almost totally destroyed, and the vault and nasal fossa are blocked by often intensely offensive dark crusts, which may be either dry, or soft and mucous in character, and often completely occlude the Eustachian tubes and posterior nares.

The lower pharynx presents a most peculiar and typical appearance: the posterior wall is dry, often puckered from lack of moisture, and intensely congested, the posterior half arches appear drawn much nearer together than in the normal condition, and on pressure with a probe the mucous membrane is found to be practically resting on the bodies of the vertebræ. Deeply congested and frequently abraded tissues are found on examination with the laryngoscope, and the trachea and bronchi are frequently also diseased.

This advanced stage of turbinated cirrhosis is almost invariably confined to individuals of a so-called "tubercular tendency," or at least to those whose physique is much below par and average resistance. The profound systemic disturbance resulting from typhoid fever, diphtheria and the like, is frequently the commencement of this disease. But too often rapid intra-nasal atrophy of this variety is the forerunner of phthisis.

In this form of atrophic rhinitis the No. 2 thymol solution is used with the greatest care; the nares are repeatedly sprayed with it until *clean*, and the spray is then driven with a strong atomizer into the mouth and as high up in the pharynx as possible, the treatment being crrried out not less than three times a week. After the thymol spray I occasionally touch the deeper abrasions with a solution of nitrate of silver, 100 grains to the ounce of distilled water, and more rarely make applications of properly diluted tincture of *galanga* to the mucous membrane, using a small tuft of cotton on a delicate applicator for the purpose. The pharynx is then painted with the No. 3 or 4 thymol solution, the applicator being gently carried up until the vault is reached. No. 3 is used until it ceases to give pain, when the stronger solution is applied—the applications being made at each sitting to the mucous membrane previously cleansed by the spray.

In all cases of atrophic rhinitis I invariably follow the thymol solution with fluid cosmoline used in an atomizer, and have found this preparation of great value in protecting the mucous membrane and preventing the formation of dried crusts: Patients frequently state that this application gives them greater apparent relief than any other used. The usual tonic and cleansing measures are used in addition, as without them but little permanent improvement will be gained: outdoor exercise and systematic "training" are insisted upon, and strychnia and chloride of ammoium are usually given internally, along with alcohol and careful dieting. DOBELL'S solution and dilutions of "Listerine" (LAMBERT) are most frequently ordered as cleansing agents for the patient to use at home, at least twice daily in an atomizer throwing a coarse, strong spray, or by simply snuffing the fluid through the nose: the nasal douche I have entirely abandoned as troublesome and dangerous.

Under the most careful treatment a cure can-

not be hoped for, and marked permanent improvement can rarely be obtained in less than seven to nine months; and I have recently seen cases which although but little improved by six months' treatment, were greatly benefited at the end of a year by the thymol treatment.

There is a third class of cases of so-called *rhinitis cirrhotica*, in which I have found the use of thymol particularly beneficial; this form occurs in neglected syphilitic or tubercular children, and occasionally in young adults of the same diathesis. The atrophic process is here very rapid and irregular, the turbinated bodies or their remnants having sometimes an almost honeycombed appearance, or may be entirely destroyed. The amount of secretion thrown off is enormous, the nasal cavities literally *leaking* into the pharynx and down the lips, giving a most disgusting appearance. On inspection the nares are found more or less completely occluded with fluid mucus, abrasions may be numerous and deep, and slight hemorrhages are common. The general appearance of atrophic rhinitis accompanied with congestion obtains: caries of bone and cartilage, and involvement of adjacent sinuses are common. According to FORCHEIMER, of Cincinnati, ozæna is invariably either syphilitic or tubercular in character, and he states that the bacillus tuberculosis is present in the nasal secretions in all tubercular cases.

This perhaps is the most difficult to cure of any of the forms of atrophic catarrh, but by the use of thymol we have achieved better results than by any other method. The treatment is carried out as for the second class of cases, with the addition of pencilling the turbinated bodies with a solution of tincture of *sanguinaria*, *myrrh*, or *galanga* properly diluted with glycerine: the solution selected being applied after careful cleansing with the thymol solutions. Applications of nitrate of silver in the solid form I think positively injurious from its well-known semi-cauterant and and constringing effect; and the insufflation of powdered starch containing a percentage of silver nitrate is as unscientfic from the standpoint of the chemist, as useless to the rhinologist, the metallic salt being converted by the starch into an inactive oxide, and the starch only serving additionally to occlude the nasal chambers. And drugs applied in the form of powder, with the exceptions of iodoform and boric acid, are the reverse of beneficial in this as in all forms of atrophic rhinitis. Specific treatment, tonics, hygiene, and thorough antiseptic cleansing are, of course, insisted upon.

In cases of syphilitic origin I believe that a practical cure may be obtained by prolonged treatment, although atrophied nasal structures will never be replaced; the tubercular cases rarely improve greatly, and usually die of some intercurrent disease before reaching adult life.

The *causes* of rhinitis cirrhotica are as yet uncertain; why one case of advanced hypertrophic catarrh should remain *in statu quo* throughout the life of the individual, and another rapidly degenerate, has not been demonstrated. Ozæna in infants is probably preceded by an intrauterine catarrh of the hypertrophic variety, since turbinated cirrhosis *ab initio* is scarcely conceivable by the pathologist. A chronic rhinitis is frequently set up at birth in tubercular or syphilitic children, to degenerate speedily into a true ozæna at the end of a few months of life. I have yet to see a case of advanced turbinated atrophy in even a comparatively otherwise healthy individual, and believe that a "tubercular tendency" is the strongest predisposing factor in the disease, and a weak vitality a necessary soil. Why also we should find in one case the intolerable odor of ozæna, and in another apparently structurally identical no odor whatever, is as yet unproved. I cannot accept the statement of LEFFERTS that the odor is due solely to decomposition—from destruction of the serous glands, consequent sticky and tenacious character of the discharges, and damming up and putrefaction of the same within the nasal chambers,—having seen malodorous cases without any considerable amount of pent up secretion, and observed no odor of consequence in other cases where the nares were completely blocked, the accessory sinuses not being diseased in either case. I think with MACKENZIE, of Baltimore, that ozæna from "constitutional causes" is much more likely to give the characteristic stench than that originating from simple inflammatory conditions.

Advanced disease of the *middle ear* is almost invariably found in all cases of turbinated atrophy of long duration; retraction, thickening and binding down by adhesions of the membrana tympani, with consequent deafness, tinnitus aurium, and aural pain, being the most frequent form of disease. Frequently the drum is deformed by cicatrices, and the history of recurrent, acute purulent otorrhœa may be obtained: a marked tendency to these subacute inflammatory attacks of the middle ear, and to the establishment of a chronic purulent otorrhœa, are characteristic of the ear lesions of advanced rhinitis cirrhotica. No improvement can be made in the aural conditions until the nasal disease has been so far as may be "cured," and I have found thymol of especial service in improving the condition of the aural lesions.

Turbinated cirrhosis cannot be considered a curable disease except the very earliest stages; highly organized structures once destroyed cannot be replaced; and in consequence of the destruction of the serous glands, and the great enlargement of the nasal chambers the patient cannot clear his nose by blowing, consequently even a "normal" amount of mucus speedily dries into scales if cleansing measures be discontinued, with the result of fresh crust-irritation and the rapid lighting up of the atrophic process. The best that can be done in advanced cases is to palliate or improve, and cleansing measures must be continued at intervals throughout the life of the indvidual to insure no active return of the disease.

After having tried almost every form of treatment, a description of which has been published, I now use thymol almost exclusively, and think by it better results can be obtained in many cases of atrophic catarrh than by any other form of treatment known to me.—RALPH W. SEIS, M. D., in *Med. News*.

ELECTRICITY IN THE TREATMENT OF EPILEPSY, BASED ON THE STUDY OF TWENTY-EIGHT CASES.*—If I were asked whether,

* Read before the New York Academy of Medicine, March 3, 1887.

under any circumstances, electricity alone was capable of curing epilepsy, my answer would necessarily be exceedingly doubtful, but, although I have neither personally known or heard of a case being thus cured, I am not by any means prepared to say that such a result is impossible or even highly improbable. If, on the contrary, I were asked whether I believed that electricity was of any value in the treatment of this disease, I should unhesitatingly and confidently answer in the affirmative. My experience would lead me to go even further than this, and to say that a certain proportion of patients failing to receive more than temporary benefit from the bromides may entirely recover when the treatment has been reinforced by judicious and persistent applications of electricity. What this proportion is must be a question for further and more general investigation. It would seem to be an easy thing to arrive at correct conclusions in regard to the relative efficacy of remedies in the treatment of individual diseases, but those who have, with much labor and careful analysis, endeavored to establish any important therapeutic truth, know full well the obstacles in the way.

There may be, for example, some one remedy that, above and beyond all others, can be relied upon for the cure of chorea. If so, it has yet to be found, notwithstanding the strong testimony in favor of and the undoubted benefit that often follows the administration of arsenic. The surprising lack of unanimity of opinion in regard to the treatment of chorea is without question due to the fact that in the majority of acute choreic cases recovery is sure to take place under favorable hygienic surroundings alone. My own observations in regard to the undoubted value of electricity in chorea have been confined to chronic cases alone, enabling me to say, and with far greater assurance than when speaking of epilepsy, that electricity will certainly cure many cases after the failure of other methods of treatment. Epilepsy is not, like chorea, frequently self-curative, and has not therefore so many competitors for the honor of its relief. The bromides, of course, hold the first place, but are by no means the only remedies for which important pretentions are made. The literature of the subject teems with suggestions and statements in regard to the good that may come from a score of different remedies. Many of these remedies are undoubtedly of value in dealing with epilepsy, not only decreasing the frequency and alleviating the severity of the attacks, but in some cases perhaps effecting an absolute cure. Among these remedies electricity has been found to act favorably on the epileptic seizures; but what should more especially entitle it to consideration in this direction, and incite to more careful testing of its powers, is the statement that I make in regard to its efficacy in certain cases in connection with other and more generally approved remedies, after these remedies alone have failed to give more temporary relief. In some most excellent remarks made long ago on the treatment of epilepsy, Dr. Meredith Clymer stated that he had never heard of a permanent cure of the disease under the use of the bromides, either alone or in combination; and so careful and experienced an observer as Dr. J. Hughes Bennett declares that he has no personal statistical evidence to offer in proof of the curability of epilepsy by the bromides. In the absence of positive proof that prolonged use of the bromides may thoroughly eradicate the disease, the most cheering observation he has to make is that it is entirely possible that such may be the case. While we may regard the first of these statements at least as extreme, the suggestion that the best results will follow only when we call to our aid every measure that will tend to develop vital power generally commends itself to all. It is not alone, therefore, on the theory of a special influence on the nerve-centers or over the cerebral circulation that we employ electricity as an adjunct to the bromides, but also because of its undoubted powerful constitutional effects. Above all, it is a tonic, and yet its therapeutic range is wide enough to include both stimulating and sedative effects. I can not but regard as both interesting and suggestive certain observations concerning the similarity of effect between the bromides and central galvanization and general faradization. Accepting the theory that a state of cerebral anæmia predisposes to sleep, it is not very difficult to believe that the feeling of drowsiness that so often follows central galvanization, and even general faradization, when specially directed to the cervical ganglion, is due to the influence of the current on the vaso-motor nerves.

In some cases sound sleep has for a few moments been induced with the subject in an upright position while receiving the current through the brain. I recall several instances where, under treatment by central galvanization, patients were repeatedly put to sleep within a minute after the beginning of the application.

Theoretically speaking, there are indications for the use of electricity in epilepsy other than its general tonic influence, or its effects upon the circulation.

Idiopathic epilepsy consists, undoubtedly, in an increased excitability of certain portions of the cerebro-spinal centers.

It may be supposed that the nutrition of certain nerve-cells becomes altered, but this change is, in all probability, dynamical rather than physical, and therefore the microscope would be as useless in detecting differences between normal cells and those possessing excessive reflex excitability as it would be to demonstrate the difference between the native steel and the powerful magnet. An important indication, then, for the use of electricity in epilepsy is this very superexcitability of nerve-cells. We know that the galvanic current directly affects the brain. We fully appreciate its anelectrotonic effect upon the peripheral nerves, and must be ready to admit the possibility of its affecting in the same way the nerve-centers. These theoretical considerations I have, so far as possible, endeavored to submit to practical tests, and I am quite convinced that this abnormal superexcitability that is so characteristic of epilepsy is in some cases held in check by the action of the galvanic current as readily as by the bromides themselves.

In several cases of *petit mal*, especially I have observed that applications of the galvanic current to the cervical ganglia of the sympathetic had precisely the same effect in interrupting temporarily the frequency of the paroxysms as the bromide of potassium.

In 1878 I read before the Medical Society of the County of New York a paper on this topic, in which were recorded several cases of epilepsy where recovery was apparently greatly aided by electricity. One of the most interesting of those cases, which I saw in connection with DR. GEORGE FISHER, of Poughkeepsie, who had treated it continuously for four years before it came under my care, had a history subsequent to my recital of the case that deserves to be recorded, the whole history, as will be seen, extending over a period of fifteen years:

This patient had had her first attack in 1872, at the age of twenty-six, but for a year previously she had been much of the time in a dazed condition, with great confusion of memory.

From this time on till 1876 the attacks had occurred at the average interval of about a month, when, instead of a single seizure she would have several within twenty-four or forty-eight hours. These attacks had occurred invariably at night. For four years she had been under a thorough bromide treatment, but notwithstanding, she had for some time before the substitution, or rather the addition, of the electrical treatment, grown decidedly worse, both as to her mind and the frequency of the epileptic seizures. She was nervous and excitable to the last degree, and with tendencies decidedly suicidal. It was evident that, if in no other way, electricity might prove of service as an adjunct to allay irritability, and as a general tonic. I treated her every other day for three months, alternating central galvanization with general faradization, and then gave her an interval of rest for three months. No attack occurred until after the lapse of six months from the initiation of the combined methods of electrical treatment.

After a second three months of treatment another interval of rest was allowed, and was then followed by a third three months' course of treatment.

Eighteen months passed with but a single attack, and twelve months without any, at which point the published history of the case ceased, closing with the remark that we were "hopeful of the ultimate results." Two months subsequently, however, fourteen months after the last attack, a second one occurred, and the central and general electrical treatment were immediately resumed, but, notwithstanding, a third attack occurred within six months.

With intervals of rest, the treatment was still continued, and it was not until November, 1880—a period of twenty-two months—that a fourth attack occurred. In July, 1881—seven months after—she had a fifth attack, and in June, 1883, after twenty-three months of freedom, a sixth attack.

The treatment, both electrical aud medicinal, was persevered with on the same general plan for two years more. Up to this date—nearly four years from the last seizure—the patient has been entirely free from even a suggestion of epilepsy. One exceedingly interesting feature of this case relates to the change in the mental and moral make-up of this patient. From being hysterical, passionately unreasonable, and personally unattractive, the graces characteristic of the best feminine type have either been restored or come as a new growth.

It is a notable fact that epileptics are often the most uncertain of patients on account of the discouragement arising from the persistence of the symptoms; but here was a patient following with a faithfulness almost unparalleled, through almost half a score of years, the same routine of treatment at the same hands.

Who can say that success would have followed any efforts, however skillful, had they been changeful and without continuity?

Noteworthy, also, is the fact that the bromides could have been taken for so many years—nearly twelve—with no apparent ultimate evil.

A second case in support of the proposition that electricity may not only prove a valuable aid in the treatment of epilepsy, but in certain cases it may be apparently indispensable, is as follows:

A. P., an unmarried woman, aged twenty-nine, came to me in February, 1879, through the kindness of DR. C. H. ATWATER. She was a poor physical wreck, and in a condition of mind bordering at times almost upon insanity. Since the age of twenty-one she had suffered from epileptic seizures varying in frequency from two to fifteen a month, and always occurring at night. A year after the first attack she had begun the use of the bromides, and for a time there had been a marked diminution in the number of attacks. This amelioration had been but temporary, and after two years of treatment she had abandoned rational medicine and submitted to various forms of charlatanry, the faith-cure and prayer-test among the rest.

No notable result had followed, and when I saw her she had again resorted to the bromides.

Formerly twenty grains of bromide of potassium and bromide of sodium, equal parts, had modified the attacks, but she now found it necessary to take thirty grains. This she had been doing for three years, seldom having more than two attacks a month. Any marked negligence in taking the medicine invariably caused a decided increase in the number of the seizures. She was in such a wretched condition, body and mind, that I interdicted temporarily the bromides, and for one month administered daily applications of general faradization. It is hardly possible for me to indicate the immense relief that followed this now well known, but not fully appreciated, method of treatment. Although there was no decrease in the frequency of the attacks, on the other hand there was no increase, as had invariably been the case whenever the bromides had been omitted, while in the direction of quieter and more prolonged sleep, better appetite, improved nutrition, and increased mental and physical tone, the change was radical. I now ordered the following prescription, which was taken without change throughout the course of the treatment:

℞ Potass. bromid., ʒ iij;
Chloral hydrat., ʒ iij;
Aquæ, f ʒ xiv.

M. S.: A teaspoonful on rising, and two at bedtime.

This combination of bromide of potassium and chloral has commended itself to my judgment as superior to most others, in connection with electricity at least, in the treatment of epilepsy.

Associated with a grain or so of chloral, a given dose of the bromides is more effective in controlling epilepsy than when the latter is given alone. The record from this time onward is as follows:

The last attack before combining the two methods of treatment was on March 5, 1879. The following month, April 15th, an attack of considerable severity occurred. From April 15th to September 16th the record is clear, but on that day, and again on September 25th, the disease manifested itself.

These were the last attacks, but until February, 1881, treatment was continued. In regard to the electricity, practically the same plan was adopted as in the foregoing case. A few months, and sometimes a few weeks only, of treatment were followed by intervals of rest.

Mrs. G., a widow, aged thirty-seven, gave this history: At the age of thirty she had suffered a miscarriage, from the effects of which she had recovered but slowly. Two years after, an abortion had been produced, attended by copious hæmorrhage, and from the exhaustion that followed she had rallied with difficulty. Domestic dissensions and other causes had told greatly upon her nervous system, and finally, in the early part of 1885, led to a series of epileptic attacks that had always occurred at night. I saw her the following April, and was the first to whom she had applied for relief. Two to three times a week measured the average frequency of the attrcks.

I gave the following prescription, which she faithfully took for three months:

℞ Potass. bicarb., ʒ ij;
Ammon. bromid., ʒ vij;
Potass. iodid., ʒ iij;
Potass. bromid., ʒ iij;
Infus. calumb., Oj.

M. S. Teaspoonful at each meal, two teaspoonfuls at bed-time.

Its effects were decidedly beneficial, as during that time the paroxysms were but five in number. The bromide and chloral combinatiou was then substituted, and during the succeeding four months but four attacks occurred. So far the use of electricity had not been attempted; but I now submitted the patient alternately to applications of central galvanization and general faradization, and from that time to the present she has suffered no attack.

But little more than a year has elapsed, it is true, since the last seizure, and it may be too soon to be entirely positive as to her future exemption, but the probabilities certainly are greatly in her favor. Some may say that this case might have progressed fully as well without the electricity. I think it highly improbable, however, and cannot but regard it as particularly suggestive and valuable as bearing upon the central idea of this paper.

I refer to still another case as illustrating more especially the value of electricity in sometimes relieving persistent neurotic symptoms, whether they exist independently or are associated with epilepsy.

The patient was a lad of sixteen, who had been under the intelligent observation and treatment of DR. PERRY, of Ridgefield, Conn. The bromides had been freely used, but with results less satisfactory than usually attend its administration. The story of his illness is a long one, and need be but briefly alluded to here. It dates back to his tenth year when he began to complain of pain in the head, of dizziness, and nausea. His face would frequently become strikingly pale and his extremities cold. Finally he took his bed, complaining of noises like the ringing of church-bells, that distressed him beyond measure.

All sounds disturbed him, and it was necessary to keep the house entirely quiet. For a time sleep could be induced only by gently rubbing the spine, and it was not unusual for him to awaken with a cry, followed by vomiting. At times he was better, and then again worse, until two years before I saw him epilepsy supervened, occurring as often as three times a month. Under the bromide treatment the attacks were held in check somewhat, but when I saw him he was having them sometimes once and sometimes twice a month. The boy was well developed and physically strong, weighing, I should say, about one hundred and thirty pounds.

While an almost endless variety of symptoms had marked the progress of this case, some disappearing permanently, either spontaneously or in response to methods of treatment, and others reappearing with measured persistency, one symptom continued without change. He was unable to entertain the thought of entering a public assemblage of any kind, and was seized with terrible fear if in riding or walking he found himself beyond a certain distance from home. In riding, so long as he kept within a radius of a mile or therabouts from his house, it was well, but any attempt to enlarge the limits resulted in uncontrollable fright. For this reason it was impracticable to take him away for medical advice, and such treatment as I gave him was administered at his home at intervals of two weeks or so. It seemed almost too much to hope for beneficial results from such infrequent applications, but this is what followed a few *séances* of central galvanization.

The interval between the epileptic attacks lengthened to eight and ten weeks; he gathered courage to drive alone to a neighboring town, ten miles away, and was soon able to make occasional visits to the city for treatment. His timidity in regard to public assemblages left him, and he freely took part in some that he attended. With the exception of these occasional epileptic seizures, every neurotic symptom disappeared, and he is now able to do a man's work. Since January, 1886, the patient has abandoned all treatment, but the attacks have not occurred with greater frequency, and he remains free from his old neurasthenic symptoms.

In the consideration of this most interesting and important disease, I am actuated by an earnest desire to arrive at correct conclusions, and it is therefore essential that I refer to the more unsatisfactory side of the picture. The total number of epileptic cases that I have treated since 1874, with special reference to the value of electricity, is twenty-eight. All of these were in private patients, and, of the number, ten abandoned treatment too quickly to be worthy of consideration in a statistical estimate of the value of any remedy.

In three cases which persisted sufficiently to enable me to give the electricity a fair trial, I was compelled to admit that it seemed in no

way to aid the bromides in controlling the disease.

It is to be noted that of these three cases, in two the attacks invariably occurred during the day while the patient was awake, and in one they were observed both day and night. Eight other cases of which I have records were under observation variously from six weeks to nine months. In all of them, as it seemed to me, the good effects of treatment were manifest in greater or less degree, and in two of them, one of which was under observation seven and the other nine months, the manifest improvement was unmistakably due, in part at least, to electricity.

Of the remaining seven cases, four I have here related; the others have been given elsewhere.*

Of these other cases, recovery took place in two and decided improvement in the other.

In regard to these observations, it will be seen that they extend through a series of thirteen years. I have been in no haste to publish these experiences, and can only regret that they are not more extended and more worthy the consideration of the Academy.

The conclusions at which I have arrived are these:

1. Electricity possesses a certain value in the treatment of epilepsy. It is not known nor is it alleged that used alone it can cure epilepsy. Used in connection with the bromides, however, its value is unmistakable, and under its use a certain proportion of patients will recover that otherwise would fail to do so.

2. It is in the nocturnal variety of epilepsy more especially that the good effects of electricity are seen, although day attacks have been successfully controlled.

3. The methods of electrical treatment that have proved most efficacious in my hands are central galvanization and general faradization.

4. When electricity fails to cure, or aid in the cure, it is often efficacious, by the method of general faradization, in affording grateful relief from nervous symptoms of an indefinable subjective character; in other words, from that general instability in the nervous system recognized under the term neurasthenia.

5. The systematic use of electricity renders the system more tolerant of the bromides, and will diminish bromic ache.

6. It is important that electrical treatment should be administered with care and judgment; especially should all interruptions of the current be avoided in central galvanization, as the resultant shock is liable to hasten rather than prevent an attack.

7. Two years must elapse without an attack before any case of epilepsy can be considered one of positive cure.—DR. A. D. ROCKWELL, M. D., in *New York Med. Jour.* Apr. 16.

THE USE OF HYDROBROMIC ACID AS A REMEDIAL AGENT.—During the past five years the writer has been well nigh daily prescribing ac. hydrodromici dil. in a variety of affections, but chiefly in complaints calling for a neural sedative, with varying, though upon the whole, gratifying success.

Though this substance was discovered as early as 1826, by BALLARD, it was first employed as a medicinal agent in 1875 by WADE, of Michigan, and was investigated by experiments upon lower animals so recently as 1881, by DR. REICHERT. According to the results obtained by the latter observer, the physiological effects of this drug are quite similar to those of the bromide of potassium, though they are more transient than the latter. "It was found to depress the reflex functions of the spinal cord, but its effects upon the brain were not observed." Already prior to the date of the experiments by REICHERT, clinical experience had established the fact that this agent is very useful as a substitute for the bromides of sodium, ammonium, and potassium. There are, however, certain conditions in which this acid is more beneficial, and others in which it is less so, than the bromides. It has been especially commended to prevent the headache, tinnitus aurium, and other disorders occasionally following the use of large doses of the sulphate of quinia. Now, my own experience, as well as that of HAMMOND and others, develops the fact that so far from being better adapted than the bromides to obviate these unpleasant symptoms, it is really less efficacious than they.

The chief condition in which the hydrobromic acid and the bromides are about equally serviceable, or, in other words, the conditions in which it forms an excellent substitute for the bromides are, according to my own conclusions, which are based on several trials of the drug in every complaint, to be enumerated, as follows: whooping cough, neuralgia, troublesome coughs occasioned by laryngeal or bronchial irritation, and cerebral hyperæmia. As the result of a half dozen trials of this remedy in cases of functional irregularity of the action of the heart associated with an excited state of the general nervous system, it was found to be less serviceable than the bromides of sodium and potassium, which were employed in a series of a dozen cases of the same character.

I have acted upon the suggestion by FOTHERGILL (Med. and Surg. Reporter, vol. xxxv., p. 317), viz., to prescribe it in combination with quinia in heart troubles, such as above outlined, and found it to yield truly admirable results. During the last twelve months, I have chosen from among the frequent examples of organic heart disease coming under notice, a number of those in which the valvular lesions were connected with irregular cardiac contractions, and have exhibited to them this drug in combination with digitalis, arsenic, and iron, with really striking results. Under these conditions the drug appears to exert a tonic effect upon the cardiac muscle, and to bring about more regular contractions. As a substitute for the bromides, this acid may also be recommended in ovarian excitement and vesical irritation, when the latter is not due to excessive acidity of the urine. In a series of six cases of ovarian sensitiveness occurring in hysterical young females, two were promptly relieved by it, the remaining four only partially. My notes furnish the details of a case which appeared in a lady nearing the change of life.

Frequent desire to micturate was the most distressing symptom; urine contained no pus. An uterine examination revealed only a some-

* Medical Record, April 6, 1878

what congested condition of the pelvic organs. She was practically cured within a fortnight by ac. hydrobromic dil. in doses of half a drachm given four times daily, and this after the bromides had failed of relieving her. From my experience with the drug in this and other cases of the same sort, I am inclined to believe that this acid is especially adapted to the treatment of excitability of the bladder or ovaries where associated with decided vascular congestion of these organs. Among the affections in whose treatment this drug possesses virtues surpassing those of its alkaline salts, are to be particularly mentioned, neurasthenia and post-hemiplegic spastic contractions of certain groups of muscles.

In two cases of neurasthenia of the sort so ably described by PROF. H. C. WOOD (*Pepper's System of Medicine*, vol. v., page 354), excited, in one instance, by prolonged and strenuous application to business pursuits, and neither preceded by nor associated with any other discoverable disease; in the other excited by the presence of bleeding piles, lasting eight years, which latter condition is now rarely manifested. Both suffered at first from attacks of vertigo connected with temporary cerebral hyperæmia followed by apparent destruction of muscular strength. One of these subjects became, for a time, disinclined to maintain his reputation as an active business man; the other exhibited marked vaso-motor disturbances. But enough of the symptoms present have been related to show that both cases were typical instances of neurasthenia. For both patients, I had prescribed alternately the bromides of sodium and potassium, and also a pill, composed of iron, quinia, and arsenic. As a result of this treatment, the attacks of vertigo became somewhat less frequent and less severe; but there was observed soon to be an increased prostration of nervous and muscular strength.

While reflecting upon my apparent dilemma, it occurred to me to replace the bromides with hydrobromic acid, which was done. The acid was found to be endowed with all of the favorable influences of the bromides, and not with any of their weakening effects upon the muscular system, which now seemed to improve in strength, an effect that was greatly to be desired. This plan was continued for two months, and at the end of this time a practical cure was obtained. It should be noted that an essential part of the treatment consisted in lessening the daily working hours and enjoining moderate exercise in the open air.

My experience with this drug in spastic contractions of certain groups of muscles in post-hemiplegia is limited to a single case. The patient, a male, aged 68 years, first applied to me in July, 1886, giving the following previous history: From his boyhood days up to the summer of 1884, he had always enjoyed good health; at that period, or two days before the date of his first visit, he had an attack of apoplexy, causing almost complete paralysis of the right side of the body. About six month later, after having sufficienty recovered to be enabled to walk without difficulty, he began to be seized with convulsive movements of the affected arm, the contractions commencing in the flexor muscles of the thumb, extending up the arm to the shoulder, and usually affecting the pectoral muscles of the same side. His attacks increased in violence, becoming soon quite painful. When I first saw him he had but little functional use of the right arm, but almost full use of the right leg. At this time the seizures occurred but once daily.

I began the treatment of his case by giving the bromide of potassium (gr. xx. t. d.), and while this had the favorable effect to lessen the frequency and severity of the attacks, it also had the still more unfavorable effect to enfeeble muscular strength on the affected side, causing the foot actually to drag. Having pursued this method of treatment for one month, with the unhappy results before stated, I decided to use the hydrobromic acid. This measure had the immediate effect not only to control effectually the convulsive attacks, but also to allow of a return of the muscular strength to the point at which it was prior to the use of the bromide. While in this state of marked improvement, he contracted a case of diarrhœa, which an over-zealous friend undertook to treat by giving freely of a mixture containing opium. He at one became very drowsy, which state in the course of twelve hours was followed by appoplexy, and this at the end of another week proved fatal. The question here arises, what is the explanation of the difference between the results from the use of this acid and the bromides?

SQUIBB has pointed out the fact that bromide of potassium given for a long time weakens the muscular tissue, and sometimes produces other changes through undue alkalinity of the blood and secretions. (Transactions N. Y. State Med. Society.)

Since hydrobromic acid, not being associated with alkaline base, is incapable of producing prostration of muscular strength, and since it has proved its virtues to be in some other respects even superior to the bromides in neurasthenia and post-hemiplegic conditions, the advisability of employing it in exchange for the bromides in these ailments is, to my thinking, free from all doubt. As has been the experience of other observers, so the writer has found this acid to be more highly serviceable than the bromides in gastric irritability.

Concerning the value of this drug as a remedy in the management of epilepsy, the opinions of clinical observers seem to be pretty evenly divided. My own experience tends to corroborate the view that this drug is decidedly less efficacious than the bromide of sodium in this disease. Thus in a marked case of epilepsia mitior which occurred in a female child 14 years of age, and having a hydrocephalic head, this acid, in doses of half a drachm four times daily, as the constant result of several trials, greatly increased the number of attacks. In a case of epilepsia major I prescribed it in drachm doses, given four times daily, with no perceptible influence. In a paper on "The Use of Hydrobromic Acid in Nervous Affections" (Med. News, June 20, 1883), DR. C. L. DANA, after having used it in six cases, concludes that in epilepsy this remedy "cannot be used as a substitute for the bromides, except in the more controllable cases; yet that it undoubtedly has a controlling influence over the disease, and he does not feel certain that if given in equivalently large doses it might not be as efficient as the alkaline salts."

PROF. H. C. WOOD (Med. News, February 23, 1884,) advocates in vigorous terms the dilute hydrobromic acid, after WADE'S formula, as

modified by FOTHERGILL in the treatment of an obstinate case of epilepsy, though in enormous doses, not less than three ounces per diem, and claims for it better results than from the use of the bromides. In the hands of ALLAN MACLANE HAMILTON, ordinary doses of this drug gave negative results in these cases.

A word as to the administration of the drug. The observations by RANDOLPH (Med. and Surg Reporter, vol. l., page 123,) show the best time for administering it to be, after salivary digestion, which is arrested by the acid, is completed, and when free, acid begins to be formed in the stomach—about three-quarters of an hour after meals. I have given it in doses varying from one-half to one drachm at varying intervals. It should, of course, be well diluted, preferably with milk.

CONCLUSIONS.

1. Hydrobromic acid should be employed as an alternate substitute for the bromides in the treatment of diseases in which their effects have been shown to be parallel.

2. It should probably supersede the alkaline bromides in neurasthenia and post-hemiplegic disturbances of a convulsive character; (as an arterial sedative) in congestions of tne pelvic viscera.

3. Except when given in colossal doses—a method not practicable in private practice—it appears to be less efficacious than the bromides of sodium and potassium in epilepsy.

4. Owing to the fact that its action is more evanescent than that of the bromides, it should be administered at intervals of not less than four hours.—J. M. ANDERS, M. D., Ph. D., in *Med. and Surg. Reporter.*

SCHEDE'S METHOD OF DRESSING WOUNDS.—PROF. MIKULICZ communicates to the Przeglad Lekarski an account of fifty cases of surgical operations which were treated by the method recommended by DR. SCHEDE at the last surgical congress in Berlin, viz., to allow blood to fill the wound and to lie between the lips after they were brought together, any deficiency in the quantity of blood being remedied by the use of the knife, the idea being that the blood either actually becomes organized or serves as a protection for the granulations as they are formed. The wound is covered with protective, to prevent evaporation. PROF. MIKULICZ'S observations included six resections of joints, four amputations, six dissections, two ligatures of arteries, seven extirpations of large tumors, etc. In thirty-six of the fifty cases union took place without suppuration, in four there was extensive formation of pus, in five superficial suppuration starting from the points of suture, and in the remaining cases pus had existed previously to the operation, and the disinfection at the time not having been complete, it continued subsequently. The general condition of the patients was highly satisfactory, even in those cases where suppuration occurred, the temperature in no case rising much beyond normal. The dressings were not removed or changed for at least a fortnight, sometimes not for a month. This appears to be of great advantage in the case of bone and joint operations, where complete immobility of the parts is a desideratum. Other specified advantages attributed to this plan are that wounds attended with a loss of substance rapidly fill up, and the cicatrices that form are peculiarly soft and smooth. PROF. MIKULICZ does not find, as SCHEDE did, that the existence of silver sutures in osseous lesions has any unfavorable influence on the cicatrisation of the wound. He remarks that it is important not to bind the external dressings too tightly to the wound.—*Lancet*, March 19, 1887.

GAULTHERIA IN RHEUMATISM.—At the New York Medical and Surgical Society, DR. FLINT stated that the results of the trial made of this substance in thirteen cases at Bellevue Hospital served to show rather better results from gaultheria than those which are ordinarily obtained from salicylic acid. The oil of wintergreen was the preparation used, and it was administered several times a day in ten-drop doses in flaxseed tea, which renders it less disagreeable to the taste and to the stomach. In some of the cases the alkaline treatment was employed at the same time. DR. BALL stated that DR. KINNICUTT had used the oil of gaultheria in a number of cases of acute rheumatism, with even better results than those mentioned by DR. FLINT. It was administered in milk, and was less disagreeable when so taken than salicylic acid or salicylate of soda.—*Med. Press*, Feb., 1887.

RHUS AROMATICA FOR NOCTURNAL ENURESIS.—A fluid extract has been sent into the market by Parke, Davis & Co. It is prepared from the cortex of the root of the rhus aromatica, sweet sumac. It acts on the plain muscular tissue of the bladder, uterus, and rectum, and may be applied to check hæmorrhages in these situations. Atonic dyspepsia is said to have been relieved by it. Dr. Unna, after a trial of three years, believes the extract to be very efficacious in the nocturnal enuresis of children. Five drops may be given morning and evening to a boy two years old, and ten-drop doses to children of six.—*Lancet*, March 12.

PICHI FOR CYSTITIS.—A. M. COOK, M. D., in Eclectic Medical Journal, speaks very favorably of the therapeutical value of pichi in cystitis and hyperæsthesia of the genito-urinary tract. He recommends the following formula:

℞ Fl. ext. pichi, ʒ vi.
Liquid potassa, ʒ viij.
Elixir aromat., q. s. ad ℥ iij.

M. Sig.—Teaspoonful every three hours. In four cases reported, relief was prompt.—*Indiana Eclectic Medical Journal*, March, 1887.

TREATMENT OF ERYSIPELAS.—For the treatment of erysipelas, DR. ARCHANGELSKI has tried a number of applications, and finds that their comparative efficiency is represented by arranging them in the following order: (1) benzoic acid; (2) tincture of iodine and turpentine, as ointment; (3) sulphate of copper; (4) sulphate of iron; (5) oxide of zinc; (6) naphthalin; (7) solution of perchloride of mercury, 1 to 300; (8) chloride of zinc; (9) iodoform.

The Medical Age.

Vol. V. DETROIT, MAY 25, 1887. No. 10.

Original Articles.

EPIDEMIC MEMBRANOUS CROUP.*

BY O. S. ARMSTRONG, M. D., DETROIT, MICH.

In November, 1878, I was called to see my first case of membranous croup. The patient was a little girl aged four, who had been suffering from hoarseness and croupy symptoms for nearly a week. I found the temperature very little above normal, pulse 140, respiration slow, labored and stridulous. No apparent enlargement of either tonsils or uvula. Pharynx slightly œdematous. Pain was not complained of, and food was taken quite freely. The parents supposed the case to be one of ordinary croup. There had been no chill so far as noticed, and no fever. The child did not seem to them to be sick, and had only been given home remedies, such as emetics, etc., to relieve the croupous breathing. I learned that for the past two days small particles of false membrane had been coughed up at intervals. I ordered the room to be kept at a temperature of 77° to 80° Fahr., and the air moistened by a kettle of hot water, into which was put a teaspoonful of turpentine every few hours. Locally, I used, by means of a steam atomizer, a spray of tinct. ferri mur. and glycerin in water. Internally:

℞ Ammon. mur., ʒj.
Syr. scillæ co.,
Syr. ipecac,
Tinct. sanguinariæ, ää ʒ ij.
Fl. ext. guaiac., ʒ ijss.
Port wine, q. s. ℥ iij.

Misce. Sig. One-half teaspoonful every hour when awake.

Also—

℞ Tinct. ferri mur., ʒ ij.
Glycerin., ʒ iv.
Syr. simpl., q. s. ℥ iij.

M. Sig. Teaspoonful in water every four hours.

Flannel cloths wrung out of hot water and sprinkled with turpentine were kept applied to the throat, and changed every fifteen or twenty minutes. Stimulants were given freely when indicated. Under this treatment the pulse was lowered to 120, and the breathing became less labored, particularly so after the use of the medicated spray; but there was this peculiarity observed in all the cases here reported, that during the hours nearest midnight, say from 11 p.m. to 2 a.m., respiration was more difficult than at any other time in the twenty-four hours. At such time the atomizer was brought into frequent requisition, and always alleviated the paroxysm. About the fourth day of treatment at midnight the symptoms became so urgent that assistance was called with the expectation that tracheotomy would have to be performed to save the patient. DR. E. A. RORICK, of Fayette, O., responded, and with his counsel a weak solution of lime water was substituted for the iron and glycerin previously used, through the atomizer. By its assiduous use and the free exhibition of stimulants, the performance of the operation was obviated, and from this time onward there was a steady improvement, and the patient was discharged cured in about twelve days after I was first called.

Case 2 was seen in consultation. Boy, aged twenty-three months, very fleshy; under treatment five days. Saw him at 6 a.m. Advised about the same plan of treatment as in Case 1, and, notwithstanding the age of the patient, no difficulty was experienced in using the atomizer, as the little fellow would grasp it with both hands and take long inspirations with indications of marked relief.

The breathing was so much improved as to almost lose its labored and crowing character, but he failed rapidly and died apparently of exhaustion the same evening.

There was more œdema of the uvula, fauces and epiglottis in this case than in Case 1, and the membrane coughed up was thin and not firmly organized. Owing to objection of the parents, no post mortem examination could be obtained in this or any other of the fatal cases.

Cases 3, 4, 5, 6 and 7 occurred in one family, in children from 2½ to 11 years of age. There was a very marked similarity in the symptoms of these patients to those already reported. The family was poor, and the surrounding hygienic conditions bad. There were only three rooms in the house, and these were in such a dilapidated condition that it was found impossible to keep anything like an even temperature. Treatment varied but little from that in previous cases, except that in two of

* Read before the Wayne County Medical Society, May 5, 1887

them quinine was given for two days before death. Two of the little patients died on the afternoon of the sixth day, and another on the evening of the seventh. Two, one about seven and the other eleven years of age, recovered. In all of the cases false membrane formed and was coughed up, but in none of them was it thick and pasty. Only in case one was there anything resembling tube casts.

Case 8 was seen in consultation. Boy, aged 18 months. Had been under treatment six days. Saw him at noon and again at 10 p.m. He died at midnight.

In none of the cases seen could I use the laryngoscope with much success owing to the efforts of the patients to get air enough into the lungs. There was but very slight enlargement of the submaxillary glands and none of the cervical. The highest temperature recorded was 100⅕°, and this occurred in one of the cases that recovered. The pulse was uniformly high and jerky in character.

Pain was not complained of and deglutition was comparatively easy. The appetite was good, and I had to caution the parents not to allow the use of too much solid food. Perspiration was profuse, particularly when the patient had a paroxysm of difficult breathing. The urine was normal in appearance and reaction, but lessened in amount. Unfortunately, I made no examination for albumen, consequently cannot say if it was present or not.

There seemed a tendency toward constipation of the bowels, which was relieved by small doses of cream of tartar or Rochelle salts. I was cognizant of two other cases occurring in young children about the same time as those above reported, both of which ended fatally.

The disease in all these cases seemed to begin in the larynx, the first symptoms being hoarseness, followed by labored and crowing inspiration, the latter so marked as to be distinctly heard from the street. In none of the cases that recovered was there any invasion of nasal cavities, eustachian tubes or fauces, by false membrane.

Is there a difference between membranous croup and diphtheria? Was this an epidemic of one or the other?

I have thought these cases worthy of reporting because they differ from anything that I have been able to discover reported as diphtheria. Their similarity of symptoms, method of invasion, low temperature, absence of pain and swelling of the glands, and the assertions of the patients that they felt well if they could only breathe, are distinct and different from any cases of diphtheria I ever saw in practice or found recorded by any of our authors on the subject.

But further than this, the fact that the disease, whatever we term it, although of a malignant type, left no sequelæ, nor the slow convalescence that we usually get in diphtheria, may at least raise a question as to whether there may not be such a disease as membranous croup differing in some respects from diphtheria. And if there is a difference in the diseases what was the cause of death in the above cases? In all the fatal cases there was marked relief in breathing before death, so that it was not due to suffocation. I hope that a discussion and interchange of views may throw a little more light on this yet much disputed question.

TICK BITES.

BY A. CRULL, M. D., DITMER'S STORE, MO.

Very little is said in medical journals, or textbooks, regarding the treatment of bites or stings of insects, yet many cases might be reported where the bite of a spider, or the sting of a hornet had caused severe erysipelatous inflammation, pyæmia, and even death of the injured person. Still less, or rather nothing, is said of tick-bites. These, I suppose are considered to be very disagreeable, but, after all, so insignificant as to be hardly worth mentioning. But almost every physician practicing in a timbered country, could cite cases of tick-bite that have been troublesome to treat, causing in some cases severe ulcerations, and in male children and adults, when on prepuce, phimosis, or paraphimosis. I do not doubt that the bite or sting of any other insect, on this tender membrane, would produce the same troublesome symptoms, but it is very rare that any other insect besides the tick locates this protected site for its attack. It seems that these little vampires have a particular liking for the penis and foreskin, as if they knew it required but little work to penetrate the tender membrane to reach the fountain of blood. The tick will, therefore, travel all over the human body until it has reached the desired location, and when arrived will fasten its bearded proboscis with great tenacity in the delicate skin. Once it gets a good hold, it will let the neck be unjointed, rather than let go. If not disturbed, after it has well buried its head into the skin, and the person attacked can bear for an hour or two, the itching and stinging its bite causes, these disagreeable symptoms subside, no poison being ejected, nor irritation or swelling follows and the blood-thirsty creature will, after it has glutted itself, die without a struggle, dropping off without aid, leaving no harm behind. The poison of these insects is of a different nature from that of other insects. Its severity does not depend on the size of the insect, the bites of the smaller one (yearling) being more irritating and causing more trouble, than the bites of the larger ones. Probably the reason of this is, that a small tick is more difficult to extract, and by pinching and scratch-

ing with the finger-nails in trying to get hold of the body of the insect, the skin surrounding it becomes more or less irritated; beside this, the head of a small tick is generally left in the skin. When a large tick takes hold it is nearly always on the thicker skin. It is thus easier got hold of, and after its removal leaves a slightly bleeding puncture, and its bite, therefore, does not often produce any serious trouble. Subjects with a delicate or tender skin are most affected by it. Generally applications of cold water, or cold astringent lotions, as lead water, or salt water, are sufficient to subdue any irritation or swelling which ensues on a bite, yet these means often fail when the prepuce is the seat of the bite, as the following case will show:

Only a few days ago, a man, aged 45, came to my office, stating that on the previous day, he had been bitten by a small tick, on the foreskin. In trying to extract the insect, the head remained behind, and by its irritating action, or poison, the prepuce as well, as the whole member was inflamed and swollen, causing extreme itching and painful erections. I found on examination, extensive œdema and infiltration of prepuce. Erythema and œdema had spread nearly all over the penis. After extracting the head of the insect, which caused slight bleeding, I ordered the constant applica- of cold water to the parts affected, if this should give no relief, gave patient solution of acetate of lead and opium, and in failure of the latter, ordered lotions of saturated volution of salt. Patient returned the following day. The itching, erythema, and swelling of penis had been relieved by the lead-water lotions, but the œdema of prepuce had considerably increased, involving nearly the whole foreskin, causing the appearance of a thin bladder filled with water. Thinking that dry applications might absorb the extravasated serum, I encircled the involved part with dry absorbent cotton, holding the same in place by a linen bandage, and ordered patient to keep penis well supported, not pendant. On the following day he reported himself well, and stated that in one night's time all swelling had disappeared, and I found that no trace of œdema was visible.

These dry applications may not be effectual in all cases of œdema of prepuce, but the instantaneous relief caused by them in this case would seem to warrant further trials in similar cases.

In closing I would remark, that certain German authors recommend the application of dry pulverized aromatic herbs in œdematous phimosis.

CLIMATE AND WATER IN THE TREATMENT OF DISEASE.

BY W. A. REESE, M. D., EUREKA SPRINGS, ARK.

In the AGE, 11th inst., the paper by DR. ROBINSON, "Climatic Treatment of Disease," and its discussion, interested me very much; but while much was brought out in regard to proper localities for invalids by the learned gentlemen, still they left out one important locality—nearer home, quite as accessible, and probably having more of the prescribed conditions than either of those mentioned, and perhaps about equal to the combined advantages of them all, except the climate is not so equable nor mild as Southern California.

Here in the Ozark Mountains we have 2,000 feet elevation, dry air, freedom from malaria, cool nights, days never oppressive, the thermometer rarely reaching 90° and no cold winds, the extensive forests to the north and northwest affording complete shelter, and has never been visited by a cyclone, this place being east of the track of all that have visited the Southwest. We are due west of North Carolina and East Tennessee, and all that can be said of Ashville and Lookout Mountain applies to this place, with the advantage in our favor of the primeval forest as a protection, whereas in the older States it has been cut away, thus diminishing the protection from cold or hot winds.

We are only 14 hours' ride from St. Louis, and a little nearer Kansas City, in a sleeping car and no change, being 332 miles southwest of St. Louis; and we have as good hotel accommodations as St. Louis or Chicago, and at as moderate rates as anywhere, and good facilities for bathing; a city of 7,000 people, with schools, churches and the finest scenery surrounding us. Then why should invalids go so much farther away, at increased cost, to get what is quite as good, or better, nearer home and at less expense.

But where we excel all the places mentioned is in the character and therapeutical effects of the waters, analysis showing that only one or two springs in the world are as pure as these, and as to the curative effects of such waters in Bright's disease, I refer your readers to the admirable work of DR. W. H. DICKINSON, Wood's Library for 1881, on Albuminuria, pages 85 and 86, in which he says that "of all diuretics, pure water is the best, and should be taken in large quantities to wash out the disturbed and accumulating cells; that the whole mischief is due to the blocking up of the tubes, and the maintenance of their channels is obviously essential to the restoration of the organ, and if the interstitial tissue be not hopelessly involved, the kidney will be gradually restored to its healthy state, and recovery is the result." The experience of hundreds in the use of these waters proves that the author is not only correct as to the therapeutical action of pure water in Bright's disease, but that we have here the water especially adapted to it, and all the better for the invalid, because it is near home. The late GEO. KNAPP, the veteran proprietor

of the Missouri Republican at St. Louis, braved the fatigue of an ocean voyage to a German spring when he could have gotten quite as good here, and within a few hours' ride of home.

Rheumatism and syphilis, with the baths and proper treatment, recover as rapidly here as anywhere, as well as catarrhal conditions, sore eyes, skin diseases, etc.

These are the facts as to the advantages of this place, and what is said of this applies in a general way to the whole region from Lebanon, Mo., on the Frisco R. R., south and southwest to the southern limit of the Boston Mountains, which in reality are only a division of the Ozark range. Here we have just as good air, the elevation being from 1,200 to 2,200 feet, and scarcely a stagnant pool in midsummer in all this region; the water being perfectly clear, so clear, indeed, that the man who is not used to it is likely to drive into water three or four feet deep that appears to him to be only a foot or so. This is the region for the invalids, and those seeking a health resort away from the seashore cannot find a better place than Eureka Springs. I have lived here seven years, and know whereof I speak.

BERGEON'S METHOD OF TREATING PHTHISIS BY GASEOUS ENEMATA.*

BY FRANCIS J. CRANE, M. D., CHICAGO, ILL.

In January last, the N. Y. Medical Record contained an article, headed "A New Treatment of Phthisis," which gives a brief outline of DR. BERGEON'S method of administering carbon dioxide mixed with sulphuretted gas, and referred to an article published in the British Medical Journal, of December, 16, 1886. This described in full the apparatus and mode of using it, and stated they had been procuring beneficial results by the method, and that PROF. CORNIL, of Paris, had also become an enthusiastic supporter of it. This led me to write to DR. BERGEON, and in the course of my correspondence, he presented me with an apparatus, as well as with the treatise of DR. MOREL, read before the French Academy last June, and also one by PROF. CORNIL. These are so exhaustive that I have embodied in this paper only the essence of both, as follows:

"New Treatment of the Diseases of Respiratory Organs and Septicæmia by the Means of Gaseous Enemata according to M. Bergeon's Method." By DR. V. MOREL. It would seem from the statements of physicians who have tried either to prevent the development, or the proliferation of the bacillus, or to destroy it, that it is the one thing which we have to overcome in the treatment of phthisis. In reasoning by analogy with other contagious diseases, as, for instance, cholera and hydrophobia, it might be urged that the bacillus is not the immediate cause of the morbid phenomena of tuberculous affections. It is known that, aside from miliary tubercles, which invade the lungs and are the cause of the patient's symptoms, the gravest phenomena of phthisis are due to the septicæmia, which poisons the patient, and is caused by the suppuration of the tubercles, which, brought in contact with air, undergoes putrefaction and is absorbed into the system. The bacillus works, then, by producing lesions of texture, which become fatal to the organism by rapidly destroying, or, by undergoing softening and absorption, produce septicæmia. To use DAREMBOURG'S expression: "The bacillus is nothing, but septicæmia is everything."

In acknowledging that it is not necessary to ascribe to the microbe all of the morbid phenomena of phthisis, it is not less true that its presence is to the organism an incessant and real danger, and that consequently, in endeavoring to discover a remedy for the lesions which it has produced, it is necessary to destroy it, or at least to neutralize its action. For this purpose such agents as sulphuret of hydrogen, bisulphide of carbon, and other antiseptics mixed with pure carbonic acid, are employed.

Principles of Bergeon's Method.—The first mode of treatment thought of consisted in applying by inhalation some substances having parasiticidal properties. It is known that antiseptic substances are poisonous, when introduced into the arterial system, either directly or by inhalation. CLAUDE BERNARD has shown that poisonous gases introduced into tho arterial system through the lungs produce toxic effects almost instantaneously. Besides, the antiseptic substances have an irritating action, and this action, operating on diseased lungs, will only increase the existing lesions, while their unpleasant odor arouse a refusal in the patients to their use; this is probably the reason why so little success has been obtained by inhalation in the treatment of phthisis, and is conclusive proof that the introduction of antiseptics by the stomach is preferable, for CL. BERNARD has shown that when a poisonous or medicinal substance is introduced into an organ distant from the arterial system; into the digestive tract, for instance, it cannot enter the arterial system, because it is expelled before reaching it. It must pass through the portal system, the hepatic veins and the pulmonary texture, there to be exhaled, or it can be expelled in the liver with the bile.

It is well established by experiments that the introduction of poisonous substances into the digestive tube may be done without danger by taking certain precautions, of which the most important consist in not injecting too large quantities at once, and not injecting more before the first has been completely eliminated. What avenue ought to be chosen? The stomach or

* Read before the Chicago Medical Society, April 18, 1887.

he rectum? In both cases, the medicament vill have to pass through the portal vein, the iver, the hepatic vein, the right heart and pul-nonary arteries, but we think the rectal way is preferable, for the patient cannot take a dislike o the antiseptic substances on account of their lisagreeable odors.

"Gaseous Enemata in the Therapeutics of Respiratory Organs, Pulmonary Phthisis, Asth-na, Whooping-cough, Bronchitis, Bronchiec-asis. Bronchorrhœa, Pulmonary Catarrh." By M. CORNIL. The principle of the action of gaseous injections and of their rapid elimina-ion by the lung, has been given by CL. BER-NARD. He showed that when sulphuretted ydrogen is injected into the rectum of an nimal, the gas is expelled by the lungs; he proved that we can so inject it in almost un-imited quantities, without causing harm; whereas its introduction by inhalation rapidly occasions grave accidents and the animal's leath. However, to introduce sulphurous ydrogen, or any other gas or vapor, into the economy per rectum, for the purpose of de-troying the micro-organisms which exist in a number of diseases, it was necessary to find a gaseous vehicle, inoffensive to the economy, nd easily tolerated by the bowel.

Carbonic acid gas admirably answers the purpose; it is very easily borne by the colon, rapidly absorbed and afterwards expelled by he lungs, with the medicinal gas which it holds. This gas itself, in all probability, plays a very important part in this new treatment of pul-nonary diseases.

DR BERGEON, who inaugurated this nethod, published a few months ago the first results obtained in the treatment of pulmonary phthisis by this method. Physicians of Lyons, Paris, Geneva and Marseilles, who have treated phthisis by the method, have generally obtained a very rapid disappearance of the phenomena of pulmonary suppuration, and a progress to-wards a state of health with all the signs of cure.

Concerning the patients I have treated by his method, I can now assert that the results I predicted three months ago have been achieved. The patients that I considered cured have no more expectoration, and give on auscultation stethoscopic signs which denote the presence of quiescent cavities, or cicatrized lesions. Some of these patients have been obliged to return to a life of labor; nevertheless their respiratory organs have stood the test, and the ameliora-ion obtained has been permanent.

While many patients whom the expectoration once so exhausted, now have only 3 or 4 grams of sputum a day, at the beginning of the treat-ment it was from 250 to 300 grams. We have found bacilli, it is true, in the sputa of these patients; yet it remains to be discovered whether these bacilli which continue to exist after the return to health have kept their func-tional activity or not. Whatever may be the mode of action of carbonic acid introduced by intestinal absorption in the venous blood and afterward expelled by the lung, it can be said from the observation of patients, that this gas, filled with proper medicinal substances, greatly modifies the respiratory function, and makes the hematosis complete and easy. It gives a sensation of well-being, followed by an increase of strength and weight, a diminution of fever and night-sweats.

The following precautions must be observed in giving this treatment: 1. The CO^2 ought to be as pure as possible, so as not to inflame the bowel. That obtained by the reaction of dilute sulphuric acid on the bicarbonate of soda has always been perfectly absorbed by the bowel without producing any toxic effect.

2. The gas should be collected in a receiver from which the air has been expelled.

3. Make the injections just before a meal, or at least three hours after, and never when the patient is weary. It is necessary to be very cautious in experimenting with other medicinal substances, for if, although the sulphuretted hydrogen is inoffensive, other agents, as tur-pentine, chloral, ammonia, iodine, bromine, ether, etc., may not be, they might be the cause of an inflammation of the intestinal mucous membrane.

It is not necessary that the dose be large: by injecting twice a day 4 or 5 litres of carbonic acid gas passed through 500 grams of sulphur water, we rapidly notice the disappearance of all the phenomena of pulmonary suppuration, either in its acute or chronical state.

BERGEON'S method has been successfully ex-perimented with by DR. CHANTAMESSE, in his service at St. Antoine Hospital, during the months of August, September and October. The following are his results: "Two patients brought to the hospital suffering with violent attacks of asthma were, half an hour after the injection with sulpho-carbon vapors, entirely relieved of the dyspnœa. The treatment having been continued for a few days, the breathing was relieved, and the attacks were not repeated during the time they remained." Nine patients giving general and local signs of pulmonary tuberculosis, with tubercular bacilli in the sputa, have obtained very great ameioration from this treatment. The increase of weight has been rapid, one pound and as much as 35 oz. a week; cough and expectoration have largely ceased. We always find the bacilli in the sputum, however. These patients have been under treatment for one month and a half. One of them has increased nine pounds in weight.

I have used this treatment with four cases; two of phthisis, one of intussusception of the bowel and one of spasmodic croup. With the

croup and intussusception it operated like a charm, overcoming both almost instantly. In the case of croup, I used the bisulphide of carbon, and in half an hour the little patient was sleeping, apparently as well as ever.

CASE 1.—MR. W., aged 26. Two sisters and a brother died of phthisis; he had been treating with various physicians and changing climate (having been to Colorado twice) for over three years. The right lung was nearly useless, as it contained a cavity corresponding to nearly, if not quite, half of its original capacity. Nowhere on this side could vesicular respiration be heard, while the left apex likewise yielded unmistakable signs of disease. There were œdema of the feet, incessant cough, broken sleep, watery stools and ravenous appetite, although he could not retain anything on the stomach: temperature 102° F. After the first injection of bisulphide of carbon, given in the evening, he slept well for three hours and was bothered very little with cough, but on rising in the morning, to use his own words, came nearly strangling for want of a cough, which he finally got, and expectorated a pint with the one paroxysm. I then used the sulphuretted hydrogen water and he improved very fast; in one week he had a normal temperature; night-sweats almost entirely stopped, expectoration was much less, and he was able to wear his shoes, which he had not been able to do for over six weeks. Unfortunately, however, at the latter part of the second week he ventured out in one of our rainiest March days, took cold, and his death, two days later, cut short the record of what might have proven almost a miracle.

CASE 3.—MRS. W., aged 34, widow, having lost her mother and older sister from phthisis, applied to me for some heart trouble. Complained of a dizzy sensation on rising from a recumbent position; feet swollen some, hectic flush, considerable dyspnœa, slight cough with no expectoration. DIAGNOSIS: Incipient phthisis with heart complication? She had noticed, also, for about a week some night sweats, which did not last, however, after the second administration of gas. She improved so rapidly that she only made seven visits in all, and pronounced herself cured. There is, however, no doubt but she will have a return of symptoms upon the slightest provocation.

This comprises all my experience; but these are facts, and facts are stubborn things to deal with. In regard to the best mineral water, I wish to say that, after trying the Lafayette, Ind., the Blue Lick, Ky., and the Ypsilanti, Mich., mineral waters, I am satisfied that the Ypsilanti mineral water is just what we want. It contains 20 cubic inches of gas to the gallon, and is so strongly impregnated with it that I use it over the second time by having solid rubber corks to replace the perforated ones when I have got through using the apparatus. MR. ST CLAIR, President of the Company, at 88 Randolph St., has kindly furnished a case of 12 quarts of water, which I have forwarded to DR. BERGEON, in hopes that it will compare favorably with the Eaux Bonnes water which he is using. I have also had an apparatus made by E. H. SARGENT which I think takes the place of DR. MOREL'S very well, differing from it only in point of cheapness, costing but little more than one-half the former.

The true place of this mode of treatment cannot be established until the experience of careful observers has been given us, years hence. I wish, therefore, to urge the profession to investigate the matter fairly, since time, I am confident, will prove that DR. BERGEON has been one of the greatest benefactors of the age.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, April 18, 1887.

W. T. BELFIELD, M. D., President, in the chair.

DISCUSSION ON THE TREATMENT OF PULMONARY AFFECTIONS BY GASEOUS ENEMATA, WITH EXHIBITION OF APPARATUS.

The President: During the last twenty-five years various specifics for pulmonary tuberculosis have been announced by enthusiastic physicians and successively secured more or less attention from the profession, yet none of these has secured in the hands of others the results claimed by its discoverer. The benzoate of sodium treatment of Rokitansky accomplished nothing in other hands; the phenic acid injections of Declat were powerless to arrest the disease in any but his own hands; the eucalyptol treatment of Roussel failed in the hands of other investigators. The latest method of treatment—that recommended by Bergeon, of Lyons, after two years' careful observation—has, unlike its predecessors, met with almost unanimous approval in the hands of those who have tried it, including physicians in the Paris and Philadelphia hospitals and several practitioners in our own city. Since the method not only promises well, but is also universally accessible to the profession, it has been deemed advisable to present the subject to the members of the Society in a preliminary discussion this evening. There will be presented communications from BERGEON, of Lyons, BRUEN, of Philadelphia, as well as the experience of several gentlemen who have used the method in this city.

DR. FRANCES J. CRANE read a paper entitled

BERGEON'S METHOD OF TREATING PHTHISIS BY GASEOUS ENEMATA.

(See page 220).

The President: This Method of Bergeon has been extensively used in the Philadelphia Hospital, chiefly by DR. BRUEN, who has kindly furnished a résumé of his experience with it, which the Secretary will read.

PHILADELPHIA, April 11, 1887.

The experience thus far obtained in the Philadelphia Hospital in the use of Bergeon's treatment of consumption by rectal injections of carbonic acid gas impregnated with sulphuretted hydrogen, has been highly encouraging.

In the Medical News, of April 2, 1887, a statement of clinical results thus far secured in my wards was presented. These results indicated that the element of suppuration in pulmonary phthisis was usually very positively influenced. The night-sweats have been controlled in twenty-five cases without an exception. The temperature has been modified even in the most advanced cases, and in some instances in which the disease has been extensive it has been brought to a normal point. A peculiarity of the temperature charts seems to be an introduction of a sub-normal temperature in the forenoon. The expectoration has been lessened in all instances, and in some has disappeared. A marked impression has been made for the better on the nervous symptoms which attend the disease, and a more cheerful and sanguine spirit has followed the therapeusis.

It would seem justifiable to conclude that we have a most important therapeutic agent in the gas enemata treatment. One case of acute broncho-pneumonia treated on this plan has recovered, and will be discharged from the hospital. The history of her case has been already stated in the article in the Medical News. Another case of phthisis with pneumo-thorax, under treatment for five weeks, is so much improved that the patient insists on her discharge. The râles have disappeared from the patient's chest (the pneumo-thorax was local and confined to the lower zone of the right thorax), the opening into the lung was apparently closed and retraction of the chest wall is going on. This patient had been been ill for a year previous to admission to the Philadelphia Hospital; the pneumo-thorax was noted on admission. She has gained over nine pounds of flesh, expectoration has ceased, sweats abolished. The cough, however, continues as a modified symptom, since she is as yet merely a case of phthisis in stage of arrest, the bacilli of tuberculosis being still recognizable in the sputa.

Two cases of commencing phthisis with moist râles, dulness on percussion, harsh breathing, deficient expansion over right upper lobe, and tubercle bacilli in sputa, have recently been placed under the treatment. In these cases the gain in one week has been most material. The râles have disappeared and the patients express themselves as benefitted. The method of treatment is surely worth a careful scientific investigation.

In our hands a solution of 5 grs. sulphide of sodium and 5 grs. chloride of sodium in 22 ounces of water has proven the most satisfactory substance to produce the sulphuretted hydrogen. A solution more strongly impregnated with sulphuretted hydrogen has not only been more advantageous, but seemed injurious, apparently inducing palor, loss of appetite, and in some cases, irritation of the bowels. The gas should be introduced slowly, not less than half an hour seems requisite for each seance. From three to five quarts can be introduced in most cases, a gain in the tolerance of the necessary distension of the bowel being rapidly acquired. The absorption of the gas from the bowel is very rapid and in half an hour the distension will entirely subside. It is sometimes introduced more rapidly, but the gain is in proportion to the time consumed in giving the gas. The carbonic acid can be pumped through the solution containing the sulphuretted hydrogen by the action of a ball with valve attachment, and a circular received from Paris mentions an apparatus made by SHET, 79 Rue Phillippe de Girard, on which an indicator is placed to register the flow of carbonic acid.

We have not obtained as yet satisfactory results from the examination of urine, or breath, nor of the effect of the treatment upon the bacillus of tuberculosis.

EDWARD T. BRUEN, M. D.
1814 S. Rittenhouse Sq.

DR. R. H. BABCOCK: My experience with this remedy is rather limited, but it seems to me there are several questions which should be considered in speaking upon this subject: *First*, is the treatment safe? *Second*, is it applicable in all cases? *Third*, is it a cure? I have already answered these questions in an article in the Journal which appeared last Saturday (April 16). Practically the treatment is safe under the precautions which are laid down, but DR. OSLER in some remarks before the Philadelphia County Medical Society, narrates a case in which the patient almost succumbed after the first treatment, the gas being charged with a mixture of bi-sulphide of carbon and sulphuret of hydrogen. We can also conceive of cases in which, on account of limited respiratory power, the rapid administration of the gas by producing distension of the large bowel would seriously embarrass the limited respiratory capacity remaining in the patient. It is also conceivable that an undue amount of distension in cases of tubercular ulceration of the bowel might be dangerous, possibly producing rupture and peritonitis, and it seems to me this is a consideration which would render us cautious about administering this treatment in typhoid fever. I have had no ex-

perience and seen no reports of cases of the disease treated in this way. In regard to its applicability in all cases; that has been partially answered in considering the previous question. It has been the experience of Geneva physicians, as reported by M. WISS, and of DE LA ROCHE, of Lyons, that there are cases which cannot tolerate the treatment at all. One patient who had hæmorrhoids suffered from such colic that the treatment had to be abandoned. WISS also mentions a case in which the treatment has to be abandoned in the course of a month, although superintended by BERGEON himself. I was asked to administer the treatment in a case in which the lungs were so extensively destroyed that is seemed to me unwise to administer it, though perhaps a small amount of gas might have ameliorated the symptoms; but had it been possible to abate or arrest the disease, the patient could certainly not have lived with such a small amount of lung left. Of course this consideration is one which renders the indiscriminate use of the treatment hazardous. There are cases in which the recovery, or arrest of the disease has been so complete that the patients are practically well, and have been able to return to their avocation. However, if we are to estimate this thing by the disappearance of bacilli from the sputum we must say it is not a cure. No case is reported in which bacilli have entirely disappeared. As you know, M. CORNIL has instituted a number of experiments on animals with reference to this question, a solution of which we are all looking for with much interest. French physicians are experimenting with a great many other substances.

I am now using the treatment upon two cases, one in bronchitic asthma, but the treatments are too few as yet for me to make any report; I would not wish to say whether the relief that has been obtained is due to the treatment or is merely a coincidence. Another case is a lady aged 34, who has been suffering from phthisis for a year and a half, and who last fall received injections of phenic acid twice daily, without any improvement, who had been taking cabinet treatments from me for six weeks, without improvement, in whom the right lung is extensively consolidated, with a large cavity; in this case the relief for the first week was certainly very surprising. The patient gained in strength and experienced a feeling of well-being, or as she expressed it a clearer feeling in her head, a feeling of brightness which she had not had for weeks. She certainly coughed less and expectorated less at a time. Her stools had been clay-colored in spite of everything I could do; at the end of a week they were of a natural color. The movement of the bowels was perfectly natural, her tongue also cleaned off in a remarkable manner at the end of five days. The treatments were continued at my office twice a day, and the patient had to come into the city so the improvement was perhaps not quite as great as if she had taken the treatment at home. The second week she did not do quite as well, which I attributed to the quality of the mineral water. At the end of two weeks she was improved in respect to all the symptoms which have been related this evening. The night-sweats had ceased, her temperature was lower, but not normal—it ranged from 99° to 100⅘°. I took her temperature at 9, 11, 2 and late in the afternoon, and the highest she had with the exception of once was 100⅘, it was repeatedly 98⅘. Her tongue did not remain clean, and her appetite did not improve as I desired. She gained strength but there was a complication, namely tubercular laryngitis, under which she improved more slowly than she otherwise would have done. M. BURGEON states decidedly that tubercular laryngitis has been very greatly improved by this treatment. In the case just mentioned the laryngeal symptoms have improved, but whether entirely due to the treatment I am not prepared to say, as she has had various sprays and one topical treatment to the larynx. Her case is somewhat discouraging owing to the extent of the disease, since it is not entirely confined to the right lung. She has complained of no unpleasant symptoms since the first treatment, when she complained of a slight burning of the anus and a desire to evacuate the rectum. Once or twice she complained of a little colic. She is now taking the treatments at home and feels very much encouraged, but the outlook to me is not what it should be. I saw her last Thursday, and I felt disappointed to learn that she is beginning to perspire again.

I think all the precautions have been taken in this case thus far, and it proves that the treatment does not give rapid improvement in all cases, and the fact cited by WISS that out of four cases treated in Geneva all died within three months, shows that it does not cure in all cases. However, it is a treatment which is so admirable and furnishes such good results in many cases that I think all physicians are justified in trying it. Another thing which recommends it is that after the patient becomes accustomed to the treatment it can be handed over to a trusty member of the family to administer. Compared with pneumatic differentiation it offers a much better chance for the improvement of the patient, although there are cases in which pneumatic differentiation will do what this will not. But thus far this method gives better prospects of benefitting a number of cases than any method which has been placed before the profession.

DR. W. H. WEAVER: A case under treatment at the Chicago Policlinic, which is making favorable progress, is one in which there is

no doubt of the extent of the tuberculosis in the left upper lobe. The expectoration was quite profuse and contained an abundance of bacilli. She has been failing for two years, but had not taken any medicine of any sort. She came to the Policlinic dispensary where I treated her; the first time giving her an injection of only one pint of gas. Her temperature that day was 101½; the next day she returned and I gave her a quart injection and her temperature was then $102\frac{5}{16}$; the next day, the third injection, her temperature was normal and I gave her another quart. When she returned for the fourth injection her temperature was normal and she seemed better in every way; said her appetite had returned, the cough was less severe, expectoration diminished greatly, and the night-sweats almost entirely relieved. At the fifth injection she had a slight temperature. She said she had had no more chills and fever for the last three days. I used a solution of about five grains of sulphide of potassium with five grains of common salt in about 20 ounces of warm water, which gives about the proper amount of sulphuretted hydrogen gas, at least the patients all say that they feel better and have no unpleasant symptoms. I have given it in three other cases, one has some pelvic trouble, and the physician who is treating her thinks that might be a counter-indication to the remedy, but she seems to be better in her general condition, has increased in flesh, and coughs less and prefers to continue the treatment. Another case of incipient tuberculosis, where the upper left apex is affected particularly, seems to be improved considerably under treatment. He has been having the treatment one week.

DR. L. L. MCARTHUR: In starting in with this treatment of phthisis I saw the difficulties that were going to arise in the apparatus, and think I can make some suggestions that will prove valuable. The apparatus presented to-night is not portable, and if the patients are to be treated at home they would either require a separate apparatus for each patient or else one must run the risk of breaking the apparatus. In the first place, I thought of a method of collecting the carbonic acid gas, by taking one of those portable laughing-gas cylinders, to be obtained at any dental depot, to a soda-water fountain and having it charged with carbonic acid gas. There can be stored from one to 500 gallons of gas, equally chemically pure with that recommended. This apparatus would simply require the turning of a stop-cock in the tube or opening to permit the gas to escape at any rate desired. If found desirable to continue the use of sulphuretted water, instead of mixing the two gases together first, it could be done by using a wash bottle and delivery tube. I believe an equally efficient method is to introduce into this cylinder a solution of sulphide of potassium, which furnishes for every ounce of the sulphide of potassium about a gallon of the sulphuretted hydrogen, The carbonic acid formed liberates the H. S. from the sulphide introduced. The strength according to Bergeon's method is about half of 1 per-cent. or a little less. By a little calculation it will be seen that the carbonic acid formed by the combination of the carbon dioxide and water would set free the hydrogen in combination with the sulphur in the definitely desired quantities, so that it would not be necessary to use the sulphuretted water. In that way the gas could be introduced into the measuring bag and then into the rectum. The cylinder would hold a sufficient amount of gas for many treatments, and as it is easily portable, it could be taken to the houses of patients and not require them to come to the office.

DR. R. TILLEY: I have had no experience whatever in this method of treatment, but I would like to say a word with reference to the apparatus which I think would certainly make the measurement of the gases used more definite. I think, notwithstanding the doctor's explanation of the number of pressures that may be necessary to constitute a quart, that one individual may require so many pressures and another so many less or so many more, and thus the other amount would be somewhat indefinite; whereas if a bottle of the necessary size was filled full of carbonic acid gas, and then another bottle with a tube attached full of water, the latter could be attached with the necessary tubes and elevated just the same as a siphon, and the water introduced into the bottle containing the carbonic acid gas and passed through the sulphuretted hydrogen water with the required rapidity, and thus it would come much more regularly than could be done by means of this spasmodic pressure of the bulb. I would like to call attention to the fact that there are on sale in this city large cylinders containing absolutely pure carbonic acid gas, imported under the auspices of the Prussian Government. The gas is condensed to the liquid state at the place where it flows from the earth at a great depth, from the natural channels. I do not know exactly where it is for sale, but at some manufactory of soda apparatus, and from communication with some of the druggists here I learn that it is only a little dearer than that which they manufacture themselves. It might be argued, however, that if it was simply a little dearer for the druggists it would not be any dearer for those who make it a practice to administer the treatment in their offices, and it would be a convenient way to obtain the gas with the absolute certainty of its being perfectly pure and always on hand.

I would like to say a word about the marked indistinctness that has characterized some few

of the reports. It was a positive relief to me when Dr. Babcock gave his more moderate report. The way in which bisulphide of carbon and sulphuretted hydrogen were confused and interchanged was perplexing. Both these agents are exceedingly poisonous, and it is well to bear it in mind. I had some experience with the sulphuretted hydrogen some years ago in the laboratory, and it was my experience that the inhalation of a small quantity was attended almost regularly with a crop of boils. In any case I think it would be better to have a more definite idea of the quantities of these poisonous agents than can be obtained by the information given us to-night.

Dr. Walter M. Fitch: For generating the gas we use a common Wolf bottle with three corks; one for a stop-cock for the acid, one for the delivery tube and one for the safety valve. This last must not be pressed in too tightly; at one time I had the stop-cock blown out and broken by putting in the acid a little too rapidly. To make the gas we used about a heaping tablespoon of bicarbonate of sodium, covering that with cold water about two inches deep. If we use hot water we make a suds that will foam up and run into the bag. We use the bicarbonate of sodium and sulphuric acid diluted one part in four. The reason for using the sulphuric acid in preference to any other is that, being absolutely non-volatile, none of it will pass over into the bag of carbonic acid gas. To make the gas the generating bottle is connected with the bag, which is emptied and tightly rolled in order to remove all the air. The generator should also be emptied of air by turning in some of the acid before it is connected with the gas bag. The bags usually hold about one-half of what they are marked—a three-gallon bag will hold about six quarts, etc. If we should over-distend it the corks would be blown out of the generator. For injecting the gas the stop-cock is turned off and the bag is connected with the bubbling tube, which extends to the bottom of the bottle of mineral water, so that the gas coming from the bag may pass down into the water and, rising up through it, be medicated by the sulphur vapor which it contains. It is injected by means of a hand bulb. In using the bulb it is important to remember that, since it is intended to be used only with water, the action of the valves is not perfect with gas, and it is therefore necessary that the bulb be held vertically, so that the weight of the valves may assist in closing them. In using it in this way we secure a perfect action which draws the gas into the bottom of the bottle and delivers it through the tube. The bisulphide of carbon has been mentioned several times. In order to use this it is necessary that the gas be washed for fear that it may contain impurities, for none of the chemicals we get are perfectly pure, and as they are most likely to contain vapors of hydrochloric acid which are easily dissolved in water, the gas is bubbled through pure water to purify it. Between the Wolf bottle and the bulb is inserted an ordinary chemical drying tube, a glass tube three-fourths of an inch in diameter, which is drawn down at one end small enough to have a rubber tube slipped over it. Into the other end is fitted a cork with a glass tube through it; in the drying tube is placed a tampoon of cotton, and the requisite amount, usually 1 dram, of bisulphide of carbon is placed on the cotton. In passing the gas through this cotton it becomes very strongly impregnated with the vapor and is injected in that manner. I think some Philadelphia physician spoke of an instrument for measuring the gas injected. A very simple way of measuring it when using a small apparatus of this kind, is with the bulb. The bulb will deliver at each compression just so much gas; in order to measure how much is delivered we simply take a measured bottle, invert it over the water with the water filling it, then introduce the rectal tube into the bottle and remove the water from it by displacement, the number of compressions being counted. The bulbs vary in size. I remember the capacity of six now in use; two count 15 compressions to the pint; three count 20 compressions to the pint, and one counts 25. Thus, with each apparatus the bulb must be measured, and knowing its capacity, the gas can be prescribed in as definite a way as any medicine measured out of a bottle.

The President: My experience with this method, extending over less than a month, comprises the observation of one case that impressed me strongly; this was a young man suffering from the last stages of quick consumption, who had been in the care of Dr. H. A. Johnson. He was very feeble, much emaciated, had badly swollen feet and albuminous urine. His temperature ranged from 101 to 103 each afternoon, and he had profuse night sweats. In addition to these usual symptoms he suffered to an extraordinary degree from laryngeal tuberculosis. He had been unable for many weeks to lie down with comfort, and according to his own statement, had not slept fifteen minutes in three months. Cough was constant and expectoration profuse. About a month before Dr. Johnson had given him three or four weeks to live. I used gaseous enemata, employing the artificial solution advised by Dr. Bruen, twice a day. Improvement began on the second day, and by the fourth day was pronounced. The cough was less distressing and the sweats and expectoration had diminished, the patient was able to lie down and sleep for two hours continuously. He was, however, so evidently near dissolution that I deemed it advisable to continue a tenta-

tive treatment, and stopped it on the fourth day. Two days later he sent an urgent request for the resumption of the treatment, saying that his former symptoms were returning. However, I declined to use the injections further, and six days after their discontinuance the patient died, nearly two weeks after his physician had expected his demise.

It should be remembered that these injections seem to arrest not the tuberculosis proper, but the sepsis which is secondary thereto, and that there are numerous other septic conditions in which benefit may fairly be expected, such as surgical sepsis, diphtheria, puerperal fever, etc. The apparatus furnished by the stores is unnecessarily expensive and inconvenient for a visiting practice. I use an impoverished apparatus consisting of a gas bag, double perforated cork and ordinary large wide-mouthed bottle—the whole costing $2.50 instead of $10. The entire outfit can be reedily improvised at a little cost and carried in a small handbag.

My limited experience gives me the impression that the artificial solution of the sulphide of potassium is preferable to either the Ypsilanti or the Blue Lick water, because the amount of sulphuretted hydrogen in these waters, as we obtain them at the drug store, appears to be extremely variable, while in the artificial solution it can be maintained at a given percentage, increased or diminished as desired, yet care should be taken to make a weak solution, about such as is recommended by DR. BRUEN, since a too concentrated solution of the poison may produce very unpleasant symptoms. This method can be employed by every practitioner as well as by the most expert specialist. If it will accomplish nothing more than relief of the distressing cough, expectoration, fever and sweats of advanced consumption, it will at least do what can be effected by no other therapeutic measure with which I am acquainted; hence it is to be hoped that it will be submitted to a general test by the profession, that we may quickly ascertain exactly its merits and demerits.

DR. C. M. FITCH: The remedies that have been offered for consumption in the past are about as numerous as the sure cures that have been offered for cancer and hydrophobia, and have commanded about as much attention from the profession. But this method of BERGEON'S comes to us under very different auspices; it comes with a letter of introduction that demands from us respectful attention. J. HENRY BENNETT endorses BERGEON as a man worthy of credit; and if BERGEON'S statements be true they are of the deepest interest to us all. It is in BERGEON'S favor also that he not only asks us to believe something, but he gives us a reason for so believing—a plausible explanation of what he wishes us to receive. He assumes that septicæmia, arising either from the absorption of pus, or the morbid product of the bacilli, is the cause of the formidable symptoms of phthisis, and that if we can antagonize this septicæmia, can undo day by day the deadly work of the bacilli, we shall gain time in which the lesions that have arisen from phthisis may be overcome.

The first case in which I had occasion to test this method of BERGEON, was one of extreme anxiety to me. The patient, a young lady 20 years of age, had previously had exceptionally good health, was well nourished, with a muscular development that seemed to defy fatigue. She returned in July last from a visit to Colorado with a cough which was referred to the dryness of the climate and the inhalation of the alkaline dust, which causes a catarrhal irritation. This seemed a plausible explanation, and as the cough was not urgent, it received but little attention until, in November, she took a cold which resulted in chills for three or four successive days, and seemed to prostrate her greatly. I then examined her chest and, to my astonishment, found extensive and marked consolidation of the apex of the left lung; there was also irritation throughout the remainder of the lung and some moist rales. I was much alarmed by what I found, for the location of the consolidation made me fear it might prove something more than simple pneumonia. Several of our best physicians tendered their aid, but the case failed to improve. The patient lost flesh rapidly, her cough became fearfully oppressive and her temperature never fell to normal, rarely below 100°, and most of the time 101° and rising to 103°. She had daily chills and profuse night-sweats, and the case presented all the features of acute phthisis. At the last examination, made by DR. BELFIELD and DR. OCHSNER, both thought they detected bacilli in the sputum, although previous examinations had failed to show them.

Late in January my attention was called to an article in the Medical Record, giving a notice of BENNETT'S paper in the British Medical Journal, which contained an account of BERGEON'S method. After considerable trouble I obtained a copy of the paper which contained this article, and went to SARGENT'S to have an apparatus made, and there learned that they had just made one for DR. CRANE, who kindly allowed me to appropriate it and ordered another for himself. Knowing nothing at that time of what we might expect in such a case from our different mineral waters, and knowthat DR. BERGEON recommended bi-sulphide of carbon as the best substitute, we commenced treatment with the bi-sulphide, and the effect was surprising. The treatment was commenced seven weeks ago to-day; during the week previous the temperature had at no time fallen to normal; the lowest point was 100°, and once it rose to 105½°, and night sweats and

chills were constant. The first time the injection was tried very cautiously, only a moderate amount of gas being used. The effect was not specially apparent; the second day the temperature still rose to 103°. That night the gas was used much more freely and with results that to us were somewhat alarming. The next morning the temperature fell to 95°, and it did not rise above 100° during the day; the cough was almost suppressed although it had previously been very distressing. The next day we did not use the gas quite so freely, but the day following the lung was almost entirely occluded; the mucus seemed to become viscid, and the air was almost shut out from the lung. There was so little elimination of the bi-sulphide through the lung that we soon began to have marked symptoms of bi-sulphide poisoning, although in many respects she appeared better; the cough was almost gone, and there were no chills. The treatment was discontinued for about ten days, and then resumed with the Ypsilanti mineral water. From that time there has been a satisfactory improvement, and she is better than she has been at any time since her sickness began; her appetite and strength are improved, and she is evidently beginning to gain flesh; her cough is greatly lessened, and the chills have altogether disappeared. Her night sweats have been absent for six weeks; although during the last warm weather she perspired a little for three or four nights there was nothing in the nature of colliquative sweating, and she seems now in a fair way to recover.

The second case in which I tried this remedy seemed about as hopeless as well could be; the patient was confined to her bed, had been suffering from severe hæmorrhage, chills, night-sweats, and great prostration. There was marked dulness at the apex of the right lung, and the physician who was treating her recognized softening. The husband, whose family were patients of mine, after the physician told him that nothing more could be done, came to me. I told him that I did not know that I could do anything more; the only thing I could suggest would be this new treatment which I had been experimenting with, and which might be of some value. He was anxious to have something tried, and the case was undertaken. At the end of four days this patient's chills, which had existed then about a month, ceased entirely, and have not since recurred. On the ninth or tenth day the sweats disappeared; her cough was relieved from the first, no opiate could have controlled it more completely. The expectoration was also lessened, her appetite has improved, and she is gaining in strength. In all respects I think she has gained as much in the time she has been under treatment as I ever saw a patient gain under any treatment in the same time.

Another case was a young man of scrofulous habit, who has a stiff knee from scrofulous disease of the joint. He has been under treatment about three weeks. There was marked consolidation in his case, also, at the apex of the right lung, and every indication of phthisis. He has improved materially; his cough is much lessened and he is gaining in strength. The indigestion and flatulence which had previously troubled him very much, has disappeared under the use of the gas; there has also been a great improvement in his appetite.

A fourth case was a young woman of twenty, who came under treatment some two or three weeks ago.

The case was chronic, was not urgent in character, at the same time I thought there was little doubt of its being a true case of phthisis. She gained rapidly from the first, and at the end of ten days her menses, which had been absent since December, returned, and her cough was so nearly cured that she considered herself well, and without consulting her physician discontinued the treatment.

Another case, that of a laboring man, large and muscular, who has been working where there is a great deal of dust, probably from mechanical irritation had contracted trouble with his lungs. He had repeated hæmorrhages, which caused great loss of strength: there was marked though limited dulness of the apex of the right lung, but the chief feature of the case was the marked loss of strength, altogether too great to be accounted for by the lesion in the lung. There seemed to be some torpidity of the liver, and a little proto-iodide of mercury was given. His strength, either from the gas or stirring up the liver, has very greatly improved.

The other cases I have seen have not been under treatment long enough to justify me in making a report. It seems to me from what I have seen that we have a remedy that is worthy further trial. Whether it will fulfill the promise of its youth we have yet to see. I have no doubt this remedy will relieve spasmodic asthma, and there are other conditions that it would relieve. In puerperal fever I should try it, using the bi-sulphide of carbon, but using it cautiously. I also think it would be of value in malignant diphtheria and typhoid fever.

The selection of "Theism" as the name of the nervous condition due to an excessive indulgence in tea, is, to say the least, unfortunate. Theism has from the earliest records of the race been the basis of man's religious belief, and this attempt to confuse it with a nervous disorder will hardly succeed.

Correspondence.

PICHI IN VESICAL TENESMUS.

In the early part of last March I was called to see MRS. H., an aged lady whom I found suffering extremely from irritability of the bladder, with vesical tenesmus. The urino-genital organs generally were in a state of great irritability. She had suffered from this difficulty for several years, and, to still further complicate matters, she was suffering from a bad form of pruritis vulvæ that had also existed several years.

After using various remedial measures for the relief of the vesical tenesmus and extreme irritability of the bladder, with but only partial success, I determined to try pichi, and gave her the following:

℞ Fl. ext. pichi, ℥ ij,
Fl. ext. hyoscyam., ʒ ij,
℔ Syrup, ℥ ij.

Sig. A teaspoonful before each meal and at bedtime.

This treatment, after a few days gave great relief. The vesical tenesmus began to subside, the urine became more normal in both quantity and quality. The irritability of the soft parts and neck of the bladder, however, still continued to some extent and I gave the following:

℞ Fl. ext. pichi, ℥ j,
Fl. ext. hydrangea, ℥ j,
Fl. ext. hyosciam, ʒ ij,
℔ Syrup, ℥ ij.

Sig. A teaspoonful three times a day and at bedtime.

This seemed at once to allay the irritability of the bladder, and with it the vesical tenesmus; the extreme irritability of the soft parts also began to abate. The obstinate pruritis that has tormented this patient so long is also greatly improved, and at this writing bids fair for an ultimate cure.

I have strong faith in pichi and in the above case attribute the beneficial results attained mostly, if not entirely, to its use.

I have this case still under treatment and shall continue the above remedies, feeling confident that, although it has existed so long, and resisted the best efforts of several physicians for its cure, by steady perseverance a perfect cure will be effected.

A. G. WARD, M. D.

Fairfield, Iowa.

CASCARA CORDIAL IN PROLAPSUS ANI

A case of prolapsus ani in a child six years of age was given under my charge for treatment last fall. On examination the subjective symptoms were, constant constipation of the bowels. The case had been under the charge of two physicians prior to the engagement of my services, and knowing the qualifications of these gentlemen, I was assured that the usual routine of astringents locally applied, had been tried without benefit. I began the treatment on November 26, by giving twenty drops of cascara cordial three times a day, and applying glycerole of tannin locally after each defecation. The cordial was to be given three times each day or as often as necessary to produce two evacuations of the bowels each day.

The case showed no evident signs of improvement for a month, and the child's parents had almost despaired of success and were on the eve of discontinuing the treatment, but being assured that to complete a cure in the case required perseverance, they continued the remedy for five weeks. The cure is now to be considered complete, as the prolapsus has been absent for two months.

The cure, I am sure, depended on, and was the sequel of the administration of the cordial, as attested by the length of time required. The glycerole of tannin would have shown its beneficial effects sooner than was shown in this case, hence I attribute the cure to the specific effects of the cordial on the bowels, toning them, and thereby overcoming the relaxation which was the cause of the constipation and the prolapsus.

THOS. M. BUTLER, M. D.

Funny Louis, La.

ERGOT AND BELLADONNA IN ENURESIS.

MRS. H. consulted me in reference to her daughter, aged nine, who had been a sufferer from enuresis for the past four years, notwithstanding she had been for three years of the time under the care of a competent physician. I placed her immediately on fluid extract of ergot (P., D. & Co.) and belladonna, and asked her to report in ten days. This she did to the effect that the child had greatly improved. I wrote a prescription for the same drugs, but at the end of the second ten days the report was not favorable. This experience being repeated my suspicions were aroused as to the reliability of the preparation of the ergot administered, and on inquiry I discovered that the druggist had employed the fluid extract prepared by another firm than Parke, Davis & Co. The fluid extract manufactured by this firm was again resorted to, and improvement again set in and continued steadily until complete recovery resulted. I have deemed it wise to mention this important practical point in connection with this case, inasmuch as had the use of the unreliable preparation been persevered in this testimony to the value of the drug would not have been forthcoming. It becomes the practical therapeutist to have regard to the quality of the preparation of the drugs which he prescribes. Success may often be dependent on little things like this.

T. F. GLOSS, M. D.

ARLINGTON, Indiana.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., MAY 25, 1887.

Notes.

The late meeting of the Michigan State Medical Society, held at Lansing on the 12th and 13th insts., was a pronounced success, the attendance being one of the largest in the history of the organization, and the reception given by Mr. and Mrs. Barnes being voted very *recherché*. The members were also very much entertained by visits to the state institutions centred at the capital—the Agricultural College, the Reform School and the Asylum for the Blind. And in addition to all these, the legislature was in session, and the eloquence of the Solons was toned up to a point in keeping with the importance of the occasion. With this aggregation of attractions the meeting was, of course, a success. Being a member of the society we dare not violate its rules further than to state that there were a number of excellent papers read—not enough, however, to mar the general pleasure of the occasion. The Michigan State Medical Society possesses the modesty of merit to a painful degree, and forbids the publication of any of its papers, except in its own Transactions, which usually appear in from three to six months after the meetings adjourn, and are circulated among the members of the society. This prevents that vulgar publicity which would ensue were members permitted to publish their papers in medical journals which are circulated among, and read by the profession. If the medical profession desires to avail itself of the richness which is secreted by the Michigan State Medical Society, it must attend the meetings and receive the droppings as they fall directly from the lips of the assembled wisdom. To disseminate this richness through the ordinary media, would be a species of sacrilege. Such dissemination does well enough in the case of your common State Medical Society, but for Michigan, never-r-r.

The Texas Medical Journal says in connection with a decision not to have wine at a banquet to be given by the Texas State Medical Society: "The days of wine-banquets at medical conventions in Texas, we trust, are over, never to return." Anent this the Medical Record has the following, and we venture to believe that the words will still strike some responsive chords in the breasts of the profession: "There are doubtless some local reasons for omitting the banquet, and we are not disposed to question the wisdom of our vinicidal brethren of Texas. It is a mistake, however, to think that medical meetings can flourish on scientific papers, cases, specimens, etc., alone. The doctor likes, as well as anyone, to get rid of the shop at times and indulge to his heart's content in the pleasures of good-fellowship. State medical societies are most prosperous and enjoyable in proportion as they give occasion for the agreeable social intercourse, combined with the presentation of well-prepared papers and discussions. It is unfortunate if the liberality of spirit and self-restraint of Texans are not so cultivated that banquets can be held at which those wishing to drink wine can do so, while those not desiring it can be served with the potable waters of the locality. Such arrangements prevail at the present time in most civilized sections, and Texas is eminently a civilized and progressive country."

The following explains itself: "Dr. Daniel G. Brinton, who has been for a number of years editor and publisher of the Medical and Surgical Reporter and the Quarterly Compendium of Medical Science, begs to inform his many professional friends, and the medical public in general, that he severed his connection with those journals on the 1st of May, 1887. He felt obliged to take this step by the opposition of the parties who own those journals to certain changes in the Reporter which Dr. Brinton considered necessary improvements, and justly due in a five dollar journal to subscribers and advertisers. The requisite authority to make these having been refused, he could not conscientiously continue to publish it at that price. It is not his intention to retire from the arena of medical journalism; on the contrary, he hopes in the early autumn to announce his connection with a journal which will fully meet the legitimate demands of the medical public of the day."

Bearing on the communicability of diphtheria and the practicability of its restriction, Dr. Baker presented to the meeting of the State Medical Society, of Lansing, on the 13th inst., a table and a diagram based on a compilation of reports by local health officers in Michigan, for the year 1886. They exhibit the results of isolation and disinfection in outbreaks of diphtheria. In the 102 outbreaks where isolation or disinfection or both were neglected, the average cases per outbreak were a little over 16, and the average deaths were 3.23; while in the 116 outbreaks in which isolation and disinfection were both enforced, the

verage cases per outbreak were 2.86 and the verage deaths were .66; indicating a saving of ver 13 cases, and 2.57 deaths per outbreak, or ,545 cases and 245 deaths during the year, by solation and disinfection in the 116 outbreaks, ompared with those in which nothing was lone.

This is what the microscopist says he does hen he drinks water from the lea . he gulps lown infusoriæ, and quarts of raw bacteriæ, nd hideous rotatoriæ, and wriggling polygas-ricæ, and slimy diatomaceæ, and hard-shelled phryocercinæ, and double-barrelled kolpodæ, on-loricated ambædæ, and various animalculæ, f middle, high, and low degree, for nature ust beats all creation, in multiplied adultera-ion.

The council of the English Society for the tudy and Cure of Inebriety, have completed rrangements for an International Medical ongress, to be held at Westminister Hall, Lon-lon, July 5th and 6th, 1887. The object of this ongress is to present and discuss the problems f inebriety medically, and from a purely scien-ific standpoint, by the best authorities, thus aying the foundation for a broader and more xact study of this subject.

The sample-copy fiend is like the poor, in hat we have him with us always. His request, owever, varies a little at times, as to style. The following is a verbatim copy of the latest f which we are in receipt: "Please send Me ome of your Sample Coppies of your Reading Iater, I am a Practissing Phasition an alpath-c." The communication is received and filed in the waste paper basket) under the standing ule governing the disposition of such favors.

Medical Progress.

EUCALYPTUS A SPECIFIC FOR TYPHOID.—In paper in the Practitioner for May, 1885, I ointed out the great benefits to be derived rom the administration of oil of eucalyptus in he treatment of typhoid fever, and the very uccessful results I had obtained therefrom in large number of cases; but in notes of this aper that appear in other journals a doubt vas expressed as to the diagnosis, *i. e.* whether t was true typhoid I had been treating. This vas evidently on account of the results I show-d, and the Journal de Médecine de Bordeaux —*apropos* of the early reduction of the tempera-ure I had obtained—said "de sorte qu'on est en droit de se demander si c'est bien à la fièvre yphoïde qu'on avait affaire."

No manner of doubt exists in my mind, but t would be a grievous pity if these doubts de-erred others from the use of such a valuable emedy as this has proved in my hands, and I urpose, therefore, giving grounds for my belief n the correctness of that diagnosis in the great majority of the cases; granting for the sake of accuracy that some few of the shorter or less severe ones may possibly have been simple continued fevers, or the "typhoid state" arising in the course of some other affection. Indeed a recapitulation of the symptoms of those cases which I enumerated in my former paper induces one to ask to what other disease they could possibly relate.

Diarrhœa, delirium, eruption, right iliac gurgling, enlargement of spleen, tympanitis, hot, dry, harsh skin, absence of petechia, dry fissured brown tongue, bloody sordes, epistaxis, accelerated pulse, and pyrexia were so commonly present that it would be necessary to doubt the accuracy of received teachings to reject typhoid fever as the complaint suffered from.

Certainly the temperature varied entirely from the prescribed manner and order we are taught as peculiar to typhoid. This, however, is because the eucalyptus obtains control over the temperature at such an early period after its administration as to obviate the maintenance of its height for the usual period (*i. e.* until the middle of the second week) given by the handbooks. Thus in the chapter on abdominal typhus (typhoid) in WUNDERLICH'S Clinical Thermometry we find the following:

"We may exclude abdominal typhus when between the fourth and sixth day the evening temperature in a child, or adult under middle age, never reaches 39.5 C. (102.1 F.), and indeed if it has failed to do so two or three times; abdominal typhus may be excluded when as early as the second half of the first week considerable or progressive diminutions of the evening temperatures are met with."

By reading on, however, I find the following saving clause, which shall be my apology for believing that such diminutions might happen if a controlling agent such as this medicine were exhibited:

"Or the course appears to be *cut short* (the italics are mine) and a retrocedent type finds a very early expression, *which may lead to complete defervescence even in the beginning of the second week*. In not a few cases it happens *after therapeutic measures at the beginning of the disease*, that this takes the desired turn very early, even after a laxative. If the disease were previously well pronounced, this termination is no reason for altering the diagnosis."

I have not, therefore, as may be seen, attempted to advance anything contrary to the dictum of such an authority as WUNDERLICH in support of my advocacy of the claims of eucalyptus to be regarded as a controlling agent of typhoid fever, and as showing what seems to me the absolute modification of the disease under this "therapeutic measure."

And it is in this complete alteration of the order of the symptoms, of the "fastigium," of the crisis, that we get a feasible explanation of the mode of action of this drug. First, I believe it acts as an antiseptic, shortening the duration of the fever by destroying its cause, rendering inert its bacillus: and, secondly, by lessening the severity of the symptoms by its locally acting and acknowledged healing powers. The inflamed and ulcerated Peyerian glands are soothed, and further spread of the mischief arrested.

That I am not alone in my view of the pos-

sibility of this method of treatment by striking at the root of the disease, I see from a paper in L'Union Médicale, by M. Bouchard, of the 24th August, 1886, on "Intestinal Antisepsis," being the result of investigations he has carried on for years. He therein relates how by the combination of certain antiseptics with charcoal he has obtained remarkable results in the treatment of typhoid fever, naphthol being the agent he has employed with the best results. I have not seen the original paper and am quoting from a review of it, but the treatment and the reasoning seem to me to be pretty nearly identical with my own, and his results are said to be "remarkable."

For the other symptoms apart from the temperature, the diarrhœa—present in the great majority of cases from the earliest stages—was typical; stools thin, generally light yellow or clayey color, pea-soupy and stinking, sometimes of a dark brown shade, mucous shreds and blood being not infrequently present.

Low muttering delirium, semi-consciousness, and picking of the bed-clothes existed in some cases, whilst in several there was subsultus tendinum during the height of the fever.

The gurgling in the right iliac fossa I invariably sought for as a very diagnostic sign, and I seldom missed it, or the pain and tenderness on pressure thereabout.

The characteristic rash I found by careful search to be present in more than half the cases, coming out on the abdomen and chest, lasting three or four days, dying away and being replaced by other spots, these in their turn disappearing. Minute sudamina were often present, but in this hot climate when the dryness of the skin is replaced during the amelioration of the symptoms by perspiration, the diaphoresis is so profuse as to account fully for them.

The tongue presented the usual furred appearance, being according to the intensity of the disease dirty red, brown, dry and leathery, fissured and hard. In the worst cases the teeth, lips, and gums were covered with bloody sordes.

The enlargement of the spleen was very distinct in a good number of cases; and epistaxis was frequent. Pulse accelerated in keeping with the fever, and the great emaciation which is so generally effected by typhoid was marked; but, on account of the shorter duration of the attacks, in a less degree.

As an external corroboration of this being "bien la fièvre typhoide" I would mention the fact that in the vital statistics for the colony of Queensland, typhoid fever stands third on the list in order of fatality, the mortality being: in 1883, 8.89, in 1884, 18.15 and in 1885, 6.19 per 10,000 of population. Therefore it is impossible to suppose that my cases were not typhoid, a very large proportion of this number having occurred in the Brisbane district.

Again, in the cases which I attended there were very frequently others in the immediate vicinity attended and certified as typhoid by other medical men. In one group of six cases (appended below) attended by me at the same time in one house, another member of the family had just died from typhoid fever—as certified to by the medical man in attendance—before I was called in. In the case of a young man I attended for this there were typhoid fever cases in the houses on either side, and in other houses in the street. These cannot have been typhoid and my cases all exceptions.

M. Bouchard in the above-mentioned paper on "Intestinal Antisepsis" mentions that after the employment of naphthol and methylnaphthol he obtained fæcal matters nearly free from microbes, and ascertained that these had lost their noxiousness. I have long believed that the fæces were rendered antiseptic by the administration of eucalyptus, for some considerable amount passes through with the motions, as evinced by the smell. If the germicidal property is active in the body on the nidus of the bacilli—the Peyerian patches—*a fortiori* would it be operative away from the warmth and moisture of the bowel? Practical experience leads me to believe this is so, for I have never seen the attendants on cases treated with eucalyptus catch the disease. My eldest daughter, a girl of thirteen, had the worst at-

Age.	H		K		D		G		W		A		K		M	
Day of illness.	34		17		8		9		6		11		30		33	
	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T
1st	92	101	84	103.6	84	102	100	102.2	100	101.8	90	103	100	105	130	104.4
2d	92	101.4	112	103.5	92	101.2	112	102.6	115	101.6	104	101.2	100	104.3	120	103.2
3d	92	104.4	100	103.1	100	103.6	100	101.5	132	103.5	106	102	104	104	120	103.4
4th	96	103.4	100	103	120	103	96	103	120	102.5	104	102.2	108	103	104	104
5th	96	104.5	100	102.8	94	102.4	90	102	96	102.2	100	103.4	96	103.4	110	104.6
6th	96	103.6	100	104	100	103.4	94	103.2	108	100.7	116	103.6	130	104.6	120	102.9
7th	96	102.5	108	103.5	100	103.4	100	101.2	102	100	112	104	110	102.9	96	101
8th	96	103	104	104	104	103.4	100	102.6	96	102	104	102.4	96	103.4	96	101.8
9th	96	102.6	104	104	104	103.8	92	102.2	96	98.6	96	101.6	110	103.6	112	102.4
10th	76	103	108	102.4	108	103.8	100	101	120	102	100	102	108	103.6	120	100.8
11th	74	102	100	101.4	100	102.5	96	101	132	103	104	103.4	108	103.2	120	100.1
12th	70	100	90	100.6	96	101.4	96	99	120	102	108	102.5	108	104.6	110	100
13th	70	100	96	98.6	96	101.4	94	99	112	100	108	102	124	102.8	110	98.6
14th	70	99.8	96		96	100.9	94		104	99	108	102.5	112	102	96	
15th	70	99	96		96	101	96		96	98.6	104	100.7	108	102.5	96	
16th	70	98.6	94		100	101	96		94		96	99	106	101.8	112	
17th	70		90		100	101	96		88		100	99.6	100	101.6	120	
18th	70		94		100	99.8	94		84		104	98.6	96	99	120	
19th	70		92		92	98.6	94		84		96		94	98.6	110	
													89		96	

··· Record lost.

tack of typhoid last year—in the heat of the summer—I ever saw, and my wife and two lady friends who nursed her through it all, none of them having had typhoid, escaped unharmed. In the group of six before mentioned the mother and two sisters—neither of whom had had typhoid—were the sole attendants on the cases, and did not suffer, though removing the dejecta, etc.

Of this group, all treated at the same time, and under the same circumstances, I here append the pulse and temperature record, as also that of a man and woman attended in another house; all showing the result of treatment by this drug. The evening temperatures I was unable to get, as distances in general practice here debar one from the opportunity of getting twice daily to the cases, and amateur observations are unreliable.

The above were all treated with the oil of eucalyptus in doses of from five to ten minims. Of the six all had diarrhœa, none hemorrhage. Five of them had the rash well developed, H had no rash. K, H, and A, were slightly delirious; whisky was administered freely, champagne to K and D. Chicken broth and beef tea to all after the diarrhœa had subsided. Milk during diarrhœa. The other two cases were treated in a similar way. K had furious delirium and severe diarrhœa with hæmorrhage, but no rash. M had neither of the former but had the rash fully developed.

In the general range of my cases the duration of the illness till the complete establishment of normal temperature has varied from a maximum of twenty days in one case to the minimum of eight days. The average duration has been about fourteen days.

The mortality since I wrote my former paper on this subject in the Practitioner nearly two years ago has been absolutely *nil*. I have not lost a single case of fever of any kind, and I have had a large number constantly under treatment, all having been typhoid with the exception of a few cases I put down as "low fever" for accuracy.

On this I would recommend a very thorough trial of the use of eucalyptus in all zymotic diseases. In typhoid where the fear of evil is so clearly established as localized in Peyer's patches, the immediate application of the remedy is practicable. I believe eucalyptus to be a specific remedy.

—LEIGHTON, *London Practitioner*.

ELECTRICITY IN THE TREATMENT OF CERVICAL CATARRH.—The use of electricity in the treatment of diseases of women constitutes one of the most important advances in medicine. It is probable that we are only beginning to recognize the value of this agent, and that the future will show that it has a much greater utility than has yet been given to it.

From LUTAUD'S L'Obstetrique et la Gynecologie en 1886, we learn that JOURET treats catarrh of the neck of the womb by faradization of the uterus, and galvano-caustic applications to the cavity of the neck. The purpose of the former is to excite contractions of the uterus, and thus relieve its engorgement and the hindrance to circulation, a condition so liable to occur from the anatomical structure and function of the organ. In all autopsies of chronic endometritis there are found not only lesions of the mucous membrane, but also of the parenchyma. It is claimed that electricity, by exciting contractions beginning at the internal orifices of the oviducts and at the fundus, relieves the stasis in the muscular parenchyma; and that the uterus is subjected to interstitial massage which restores its lost tonicity. It not only produces these results, but by its dispersion upon other pelvic organs, it also exercises a favorable influence upon their circulation and innervation.

For the application JOURET directs that the patient should lie upon her back, with the pelvis somewhat elevated, and that the bifurcated positive pole (covered with moistened chamois skin) should be applied to each side of the recti muscles just above the pubes. The negative pole, having the form of a uterine sound, and covered with caoutchouc to a little more than an inch from its extremity, is introduced into the cavity of the neck, or of the body, if the internal os permits. TRIPIER'S instrument is preferred; by it the number of interruptions may be made to vary from fifty to three thousand per minute, and the current can be graduated in tension and intensity. In uterine faradization the intensity of the uterine contractions should be progressively increased according to the sensations of the patient; but when the pain becomes decided, the intensity should be lessened. The duration of a sitting will vary from five minutes as the minimum to ten as the maximum, according to the sensibility of the person, or the atony of the uterus, the degree of the engorgement, and the length of time it has continued. After an application, if it be properly conducted, the patients, nine times out of ten, express themselves as feeling lighter and able to walk better.

That which TRIPIER has called the chemical galvano-caustic of the cavity of the neck, has been defined by him as a potential cauterization of the cervical tract by the continuous current. JOURET does not regard this as in all cases indispensable, but it is necessary sometimes in consequence of the development of the glands of the cervix, forming the so-called ovula Nabothii; sometimes by the formation of hypertrophies of the mucous tissue which give origin to a thick, creamy, purulent discharge, or which, when ulcerated, cause hemorrhages. In the application of the constant current, a large plate of tin, covered with agaric or chamois which is thoroughly saturated with cold water, is placed upon the abdomen, or upon the thigh, and is the positive pole. The caustic electrode, the negative, is then introduced into the cervix, which is exposed by a speculum; if cauterization of the uterus is desired, the pole is passed into its cavity. Usually intensity of the current is from fifteen to twenty milliampères, and the sitting is from five to ten minutes. The cauterization is, if necessary, repeated according to indications—that is, until the disappearance of the abnormal secretions arising from inflammation of the mucous membrane and from the hypertrophied glands.

JOURET states that he applies this electric treatment almost invariably in chronic endometritis, and that a long experience has led him to prefer it to any other method of treatment, because of the facility of execution and the constancy of the favorable results.

The favorable effects from faradization of the engorged uterus are so generally recognized by those treating diseases of women that it is not necessary to add a word to the commendation of this treatment given by JOURET. If a like satisfactory result can be had in chronic endometritis from galvanization by others as well as by JOURET, this hitherto obstinate disease will cease to be an opprobrium to the profession.—*Med. News.*

NOTE ON SOME OF THE USES OF THE OIL OF ERIGERON.—DR. ROBERTS BARTHOLOW in April number of *Physician and Surgeon* calls attention to the uses of the oil.

The oil of erigeron has not been much employed as a medicine at any period, and of late years, hardly at all. A quarter of a century ago its value as a remedy for certain kinds of hæmorrhage was known to a few physicians of Philadelphia, but that fact never obtained general recognition. An accident led me to the discovery—if I may venture to use so imposing a term—of its remedial virtues in certain affections of the genito-urinary tract, and to these observations I now briefly call attention.

That oil of erigeron is entitled to the repute it had at one time as a remedy for certain kinds of hæmorrhage, I am well assured by recent experiences. Sometime since casting about for a remedy in a case of metrorrhagia that had severely tried my resources, I fell on erigeron oil but with a rather despairing sense of its probable inutility. I was proportionately pleased to find that it acted admirably. As one case can no more establish the value of a remedy, than one swallow can make a summer, I have since made numerous observations with the view to ascertain its real powers. I am accordingly in a position to re-affirm the statements formerly made, and to express my belief that in oil of erigeron we have a valuable remedy for certain cases of menorrhagia and metrorrhagia and, probably, passive hæmorrhages in general. In some cases of *neurasthenia*, it now and then happens that menorrhagia becomes an embarrassing complication; but I have found the erigeron oil to act very efficiently, and whilst it has moderated the flow to proper dimensions, has improved the general condition and lessened the nervous irritability.

For the most part the uses of the oil of erigeron for the conditions above mentioned, are not novel. Finding, however, that it is a really effective remedy in menorrhagia and metrorrhagia, I then had recourse to it in these conditions having their origin in albuminuria and then it was I ascertained that it checked remarkably the waste of albumen. From this point it was but a step to observe how far this remedy affects the course of Bright's disease—or such chronic forms of albuminuria as are due to tubal and interstitial nephritis and cases combining these two morbid processes. No attempt was made to arrive at an exact differentiation, if indeed such be possible. It suffices to state that the chronic cases of nephritis united by the common symptom—albuminuria were included. In the chronic form of Bright's disease, erigeron oil lessens the amount of albumen, lowers the abnormal vascular tension, and improves the general condition. It has also seemed to have a most favorable action on the headache, the nausea and other symptoms of uræmic character. Whether it be actually curative in cases not too far advanced, can be determined only by careful and sufficiently protracted trials. Thus far it can be said to promise well.

Oil of erigeron also acts in a very beneficial manner in cystitis, lessening the irritability of the bladder and diminishing the catarrh. In a case of prostatic disease with very great irritability of the bladder and much catarrh, it seemed to have an excellent effect.

In catarrh of the bronchial tubes, chronic bronchitis, and in cough of a nervous character I have seen very considerable relief given by it. Indeed, in these affections it has seemed to me to afford as much relief as *terebene* which has been much vaunted of late, and with justice.

In administering it, I have usually directed it in five drop doses every three or four hours. It may be conveniently exhibited dropped on a lump of sugar. It appears to me to do better in moderate doses rather frequently administered so as to maintain a constant impression, than in occasional larger quantity.

Besides the foregoing practical experiences it may be mentioned that oil of erigeron is an antiseptic and in this capacity may prove useful. But if it had no other practical applications than those suggested by my own experience, it will deserve a prominent position as a remedy.

A NON-IRRITATING PREPARATION OF MERCURY.—From a reprint of the St. Petersburg *Medicinsche Wochenschrift* upon the internal application of hydrargyrum tannicum oxydulatum in the treatment of syphilis by DR. CARL SCHADECK, of Kiew, Russia, we notice that further experiments have been made with the above mentioned substance, first brought to the attention of the medical profession in 1883 by LUSTGARTEN of Vienna. The author cites a large number of cases in which he has used the hydrargyrum tannicum oxydulatum, and as the result of his experiments he gives the following resume:

1. The preparation is easily absorbed.
2. Patients bear it well, because it affects the mucous membrane of the digestive canal but little or not at all.
3. The therapeutic effect when hg. tannic. oxd. is administered internally, especially during the condylomatous stage of syphilis, is not inferior in any respect to other preparations of mercury internally used.
4. The new preparation is especially useful in light forms and relapses of the secondary period.
5. The internal use of the remedy does not protect from relapses which have been observed just as frequently under the treatment with hg. tannic. as with other methods of treatment.
6. Women and children bear the preparation very well, but they require much smaller doses than men. For women, 0.1 to 0.3; for small children, 0.01 to 0.03, are sufficient. When larger doses are given to women or children, the undesirable mercurial symptoms may appear very readily and interrupt the treatment.

On the basis of the above data, obtained,

from 46 cases of the internal application of hg. tannic. oxyd., the following conclusion as to the desirability of the new preparation may be formed:

It undoubtedly possesses the same therapeutic advantages as other preparations of mercury, but it is preferable to other preparations in that it does not at all, or to a very slight degree, irritate the alimentary canal. It seldom causes disturbances of digestion, and may, therefore, be substitutee with advantage for any of the hg preparations such as calomel, corrosive sublimate, protiodide and biniodide of mercury, etc.

Hg. tannic oxydul. is especially adapted for the anti-syphilitic treatment of women and children, especially of patients with a weak digestion, for the light forms of the secondary period, or manifestations of a chronic character, particularly the relapses and generally all cases that do not require an especially energetic treatment with hg. The preparation is of great utility when used as an after-cure, after systematic inunction or cure by injection.*

INJECTION OF ETHER IN CASES OF SUPPOSED SUDDEN DEATH.—"I fear you are too late," said the husband, as he hurried me to the apatment where his wife, from sudden failure of the heart's action, was lying insensible, and as the nurse informed me, "dying." It was impossible to administer by the mouth a restorative, so without delay I injected hypodermically twenty drops of ether, sp. gr. 0.720, and, as the improvement was not as quick as I desired, forthwith twenty more. To the complete astonishment and great delight of the friends, consciousness and strength rapidly returned.

The sudden deaths which have so lately thrilled the public mind, more especially the death of LORD IDDESLEIGH, of London, and MR. CHRISTOPHER BUSHELL here, have influenced me to send you the above record, not as the proclamation of a new discovery, but as a suggestion—a suggestion in connection with the alarming newspaper reports which usually run somewhat thus: "Mr. —— suddenly became ill, when, sinking, he was supported by his friend. Dr. ——, who happened to be present, was most assiduous in his attention, but at last pronounced life extinct." Should it not be impressed on the public that the easiest mode in which respiration can be carried on is when the body is extended at full length—not lying on the back, but with the inclination towards the prone position? Nature throws down to assist the encumbered circulation; the officious kindness of indiscretion and ignorance supports the fainting sufferer. Again, would it not be well in these times of frequent sudden deaths from weakened hearts that each medical man should have in his possession, ready for immediate use, his hypodermic syringe case, with its little bottle filled with ether? Would it not be well, too, that the possessor of a weak heart, or, better still, the friend who accompanies him, should also have the ether and syringe ready for instant employment? Ladies with neuralgia practice hypodermic injections of morphia by the advice and under the direction of physicians. This I would condemn. But the friend of a valuable life, the tenure of whose leasehold is uncertain through the possession of a weakened, or flabby, or a fatty heart, might well be instructed in the use of the subcutaneous injection of ether. More than one example might be adduced to show that the immediate stimulant might rouse the flagging pulse-throb; and then, instead of the announcement that "life was extinct," one might read that after the injection the appalling symptoms quickly passed away, and what appeared to be the approaching death, gave place to the renewed energy of life, with all its usefulness.—*Lancet*, April 23, 1887.

*Neisser, On the therapie of syphilis. Wiesbaden, 1886.

THE NUTRIENT VALUE OF PEPTONE ENEMATA.—This important subject was discussed by HERR EWALD before the Verein f. innere Medizin in Berlin at its session of February 21, in an able address in which the results of numerous experiments were given. Omitting details, such as the preparation of patients, the mode of testing results, etc., we may note briefly the following: The decomposition of nitrogen, *i. e.*, the excretion of nitrogen by the kidneys, was greatest when Merck's peptone was employed, and but little less on the employment of egg albumen. The nitrogen excretion was much less in the case of Kemmerich's peptone, and least of all when no peptone was given. As regards the retention of nitrogen in the system, the results were different. Kemmerich's peptone here gave the best results; of little less value was egg albumen; and least of all casein. The difference between the different values was very great, both between the different substances and the same substances employed at different times so that the administration of equal quantities at different times did not always give like, but changeable results, a result which, as the author thought, plainly showed that it depended on the momentary disposition of the individual, and that consequently resorption through the mucous membrane of the rectum was not a purely physiologico-chemical act. A remarkable fact was rendered evident, that during the whole period of experiment, in which a great variety of nutriment was given, the weight of the patient remained nearly the same, the oscillations observed not reaching to a kilo. This circumstance was looked upon as a proof that the albumen absorbed was not deposited, but remained in the system as circulating albumen. The practical value of the experiments is of considerable importance. A comparison of the cost of the various foods made use of in the experiments gave the following results: 40 grms. of Merck's peptone given in three days cost 3.20 marks. The corresponding quantity of Kemmerich's peptone (40 grms) 2.7 m, whilst the corresponding amount of egg albumen contained in eighteen eggs cost 1.25 m. The same quantity of egg albumen with 15 grms. of pepsine, 2.25.—*Med. Press.*

ADONIS VERNALIS IN HEART DISEASE.—DR. J. G. HERRMANN, of St. Louis, writes us that he has recently had considerable experience with the use of adonis vernalis in cardiac affections. He believes that his experience, which has extended over ten months, warrants

his statement that, while free from the evil effects of digitalis, infusions of adonis vernalis are quite as efficacious as that drug. He prescribes it in the form of an infusion, of the strength of three drachms of the herb to six ounces; of this he gives a tablespoonful every two hours. He refers to several cases in which this drug proved successful even after digitalis had failed. One was a case in which the feet were highly œdematous, and there was general anasarca from heart-lesion. In two weeks of treatment with the infusion of adonis vernalis every two hours, in tablespooful doses, almost perfect relief was secured. So also he states that he has caused great relief to a case of ascites, produced through heart disease. He noticed that it increased the fulness of the pulse and strengthened the cardiac pulsation. In asthma also he has combined it with quebracho with very satisfactory results.

The following are some of the prescriptions which he has employed.

℞ Fl. ext. adonis vernalis

Sig.—From two to six drops, as necessary.

℞ Fl. ext. adon. vernal, f ʒ ss.
Syr. menth. pip. ℥ vi.

Combined as desired sometimes with brom. sodium and tr. opii camph.
Sig.— ʒ i to ℥ i every two hours daily.

In asthma?

℞ Fl. ext. adonis vernalis, ʒ ss,
Fl. ext. quebracho, ʒ ii,
Tr. opii camph., ʒ ii,
Syr. menth. pip., ℥ vi, M.

Sig.— ʒ i every two hours.

—"*Med. Summary*," April, 1887.

ATROPINE INJECTIONS IN HÆMOPTYSIS.—The subcutaneous injection of atropine in cases of hæmoptysis was recommended by TACKE in 1882, and DR. HAUSMANN, of Meran, has found it to be a most successful means of allaying recurring hæmorrhage from the lungs. (International Klinische Rundschau, No. 5, 1887). The great indication is to allow of the formation of a thrombus in the bleeding vessels, as TRAUBE explained, by diminished blood-pressure. The capillary pressure will be lowered when the smaller arteries have their calibre lessened; hence the use of digitalis, restricted diet, and rest. Reflex vaso-motor constriction may also be assisted by astringents or the application of cold. In chronic (and passive) cases iron is recommended. Ergotine, turpentine, morphine injections, and alcohol are favorite remedies. In passive hæmorrhage from congestion some recommend wine, walking about, and deep respirations; in active hemorrhage, only rest, ice, and morphine. But there are cases which resist all these measures, and in these DR. HAUSMANN has found hypodermic injections of atropine wonderfully efficacious. The following examples are given: 1. A patient with cavities in both lungs had hæmoptysis twice daily for six days to an alarming extent. The hemorrhage was then arrested by a hypodermic injection of 0.3 milligramme of atropine ($\frac{1}{200}$ grain nearly). After two months the hemorrhage recurred, and was only arrested by recurrence to atropine. 2. A patient at San Remo was troubled with hæmoptysis all through the winter of 1884, in spite of every care, and it only desisted in the summer. Next winter at Meran he was again similarly affected for a long time, till two injections of atropine (of the same strength as above) arrested the attack altogether. 3. In October last year DR. HAUSMANN at once stopped severe hæmoptysis in a lady who had been treated in vain for eight days by ergotine injections, turpentine, etc. The qualities of atropine recommended for hypodermic injection in cases of profuse or moderate hemorrhage from the lungs, which resists other means of treatment, vary between 0.2 and 0.5 milligrammes ($\frac{3}{1000}$ grain to $\frac{7}{1000}$ grain).—*Brit. Med. Journal.*

ARTIFICIAL AND HYPER-ALIMENTATION IN PHTHISIS.—In an account of the effects of artificial and hyper-alimentation, as practiced in PROF. PEL'S wards in Amsterdam, Dr. VAN EEDEN states that the meat powder treatment introduced by DÉBOVE (which he had had an opportunity of studying in Paris) is always of service in phthis when the disease is not very far advanced, and when it is not of a "malignant" nature. The cases which do best under the treatment are those in which here is not hereditary taint and where the disease has progressed regularly, with a not very rapid loss of strength, and with only slight hectic, anorexia, anæmia, and emaciation. The chances of successful treatment are slight where the disease has made rapid progress, with a continuous high temperature. The existence of a considerable degree of pyrexia is, however, no contra-indication to the use of the treatment. If diarrhœa and gastric irritation are produced by the artificial alimentation, it is best to discontinue it. In order to accustom the stomach to the meat powder, small quantities only should be given at first—not more than about half a pound during the twenty-four hours; this amount may gradually be increased to one pound and a half. The use of the œsophageal sound for the introduction of the food is considered by DR. VON EEDEN as advisable in all cases, and imperatively necessary in hyper-alimentation. Quantities exceeding three pounds of meat powder per diem, however, are not by any means always required, and should only be given when smaller amounts do not succeed, and where the patient bears the treatment well. The method must be diligently and patiently practised, and the weight of the patient accurately noted. DR. VAN EEDEN remarks that so little is known of the way in which hyper-alimentation controls the development of tubercle, that whoever attempts to practice DÉBOVE'S treatment must be prepared to meet with many difficulties and disappointments. Notwithstanding this, however, he has witnessed some surprisingly good results from its employment.—*London Lancet*, April 30, 1887.

ERGOT IN ERYSIPELAS.—One of the most unsatisfactory processes to deal with, on account of the want of success attending our efforts, is that of rapidly spreading erysipelatous inflam-

mation. It is often found to be the case, that a focal point existed early in the disease, from whence the redness and accompanying tenderness spread rapidly, until large areas of skin were involved, and danger to life was imminent. In these, as well as others presenting features less marked, in which the tendency to spread is less pronounced, many local remedies have been applied, with varying success, and almost uniform reports as to their efficacy. The last is perhaps due to the fact that most of the cases of erysipelas are favorably influenced by iron, given internally, generally in the form of the muriated tincture, and which treatment is nearly invariably pursued. A local application which is never mentioned in text-books or papers, at least it has escaped our notice if it is, but which has proved to be of the greatest practical value in one of the large institutions of this city, is the fluid extract of ergot. This remedy, which answers all theoretical as well as practical purposes, has been found to far surpass all other local remedies in the treatment of this affection in this institution, at which we had an opportunity of seeing it constantly used for a year in a ward, set apart for those cases, which was never vacant. It is painted on with a brush quite thickly, and rapidly dries, protecting the skin from the air, and beside, answering the theoretical purpose of contracting the gorged capillaries. Success with this procedure was so pronounced and uniform, that nothing was ever used in its place, the case being treated with the full confidence in its powers to allay the pathological process gained by repeated successes.—*Weekly Med. Review*, April 9, 1887.

Salol in Medical and Surgical Practice.—Salol has recently been extensively used in the Jewish hospital, Berlin, both in the medical and surgical wards. The Therapeutische Monatsheft publishes two papers on the subject from the pens of Drs. S. Rosenberg and L. Feilchenfeld. The former gives an account of the effect of the drug in acute rheumatism. He applied it at first in 15-grain doses six or eight times a day. In almost all the cases this had the effect of bringing down the fever and relieving the pain in the joints in from twenty-four to forty-eight hours. The number of doses was then reduced to from five to two per diem. The continuation of the treament did not, however, appear to prevent the occurrence of complications, as peri- and endo-carditis and pleurisy; sometimes also singing in the ears, sweats, nausea, and vomiting occurred, and carboluria was always present for a time. The digestive organs were never affected for any prolonged period. Dr. Rosenberg thinks salol acts as a kind of "masked salicyl," being insoluble in the gastric juice, and thus having but little effect on the stomach. It does not, he says, decompose into phenol and salicylic acid until the pancreatic juice acts upon it in the duodenum. Notwithstanding its general advantages over salicylic acid, the latter should be used in very severe cases and when there are repeated relapses. Dr. Feilchenfeld employed salol in various surgical cases, both internally and as an external application. In cystitis and pyelitis he gave two or three 15-grain doses per diem with excellent results, and with little in the way of disagreeable symptoms beyond a green coloration of the urine of no particular moment. Externally salol was found very useful in ulcers of various kinds, and notably in a very obstinate case of bubo consequent upon a soft chancre, which had been operated on and treated with the strongest caustics without showing any disposition to heal. Salol, however, rapidly produced a change for the better, and cicatrization soon occurred.—*Lancet.*

Chlorate of Potassium in Epithelioma.—Observers from various parts of the world are reporting excellent results from the local use of chlorate of potassium in the treatment of epithelioma. In some instances a saturated solution has been made use of, with recovery occurring in from five to eight weeks.

In the Gazette des Hospitaux, of March first, M. Réclus described the results of the treatment of epithelioma by chlorate of potassium. He relates the case of a woman suffering from a tumor, about the size of a walnut, situated on the right cheek. The skin over it was tight, of a violet-brown color, and was cracked in several places. When pressed, the cracks discharged sanguinolent serous matter. There were brownish, squamous spots, slightly cracked here and there, about the size of a lentil, on the forehead and other parts of the face. The patient presented all the symptoms of cutaneous epithelioma of a particular kind, namely, cancroid of the skin, or polyadenoma of the sudoriparous gland. M. Réclus excised the tumor, but a part of the skin remained red, thick and inflammed. Compresses of a 6-per-cent. solution of chlorate of potassium were applied. Tedeschi, in 1847 first treated an obstinate case of epithelioma of the skin with chlorate of potassium, MM. Leblanc and Bergeron employed this substance in the treatment of horses, in 1857. M. Réclus described several cases of epithelioma in which he had used it successfully. It should not be given internally. M. Reclus recommends chlorate of potassium only in cases in which the integument alone is affected; in patients of feeble constitution, in those suffering from any affection of the heart contra-indicating the administration of chloroform, and in extensive epithelioma involving the subjacent tissues where resection or amputation is necessary.

Picrate of Ammonia in Malarial Disease.—Dr. H. Martyn Clark, of the Amritsar Medical Mission, Punjaub, has treated no fewer than 10,000 cases of malarial diseases with picrate of ammonia, and in half the cases he has kept a record. In nine cases out of 5,000 did the picrate fail, and in these quinine cured at once. The usual dose is from one-eighth of a grain to one and a half grains four or five times a day in pill. Half a grain is a fair average dose. Thus given the result is soon visible. In the great majority of cases treated, one-half grain doses in the interval prevented the recurrence of the next attack of the fever, while in about twenty per cent. of the patients two or three attacks followed before the fever ceased. In only one case of quartan ague, despite large doses of the salt, the fever recurred for

six periods, gradually diminishing in intensity, and then yielded to it. It is equally successful in all the forms of ague, but it is a curious fact that the cases in which it failed to cure were all of the tertian variety. DR. CLARK has also employed this agent in the treatment of twenty-five cases of malarial neuralgia of various nerves, six cases of malarial headache, and one of malarial colic. In all these instances it cured completely and speedily. In addition to being cheaper and given in smaller doses, picrate of ammonia does not produce the unpleasant effects that quinine does, such as headache, deafness, tinnitus, etc.; nor does it, like quinine, disorder the digestion or cause nausea, as quinine does in India.—*Chemist and Druggist*, March 19, 1887.

JÁMBÚL SEEDS IN DIABETES.—As far back as 1883, MR. BANATRALA called attention to jámbúl as a remedy in chronic diabetes (Medical Record). Since then, I do not think this drug has received as much attention from the profession as it deserves, and it is in the hope of securing for it a wider trial that I beg you to insert this short note.

The seeds are the product of *Eugenia jambolana*, and must not be confounded with "jumble beads" or jequirity seeds, an infusion of which was introduced a few years ago as an application for granular lids.

I lately tried powdered jámbúl seeds in a case of diabetes in which the patient had been ill for over six months, was greatly emaciated, and quite prostrate He was suffering from great thirst and ravenous appetite; there was also great restlessness. The urine had a specific gravity of 1040 to 1042, and from 7 to 7½ quarts were passed in the twenty-four hours. Five grains were given six times in the twenty-four hours for a fortnight. At the end of that period, the patient was able to get up, and walk out for an hour at a time, was neither thirsty nor abnormally hungry, and was passing four to five quarts of urine of a specific gravity of 1020; he could sleep well, and felt strong. During the time he was taking the jámbúl his diet was not restricted in any way. I hope that others who try this drug will report results.—GEO. C. KINGSBURY, M. D., in *Brit. Med. Jour.*, March 19, 1887.

PHYSIOLOGICAL ACTION OF COCAINE.—DR. FREIBERG, working under DR. BLUMENTHAL, at Kowno, Russia, has arrived at the following conclusions respecting the physiological action of cocaine (Berl. Klin. Woch., No. 10). Cocaine is a powerful anæsthetic, its action being limited to the surface in its immediate neighborhood; and when brought into contact with an exposed nerve the anæsthesia is disturbed over the periphery, but the central end of the nerve and motility are unaffected. In doses of half a grain to a grain in rabbits, and rather more in dogs, cocaine causes anæsthesia of the cornea, dilatation of pupils, retraction of eyelids, and exophthalmos; tonic and clonic spasms may occur, with loss of consciousness, and often fatal issue. The epileptiform spasms are doubtless of cortical origin. A difference as to the anæsthesia is observed between dogs and rabbits when cocaine is applied to nerve trunks. In dogs reflexes are abolished; in rabbits they are increased. Cocaine has a special affinity for the sensory and terminal sensory fibres of the cortex cerebri, whose function it inhibits. The disturbance of co ordination may be attributed to interrupted conduction in the sensory fibres, both central and peripheral; and the convulsions, which are the main cause of death in cocaine-poisoning, are due to the vasomotor spasm and anæmia of the cortex. Bromide of potassium and the application of cold to the surface counteract this tendency; but with the first appearance of symptoms of cerebral anæmia, these toxic effects of cocaine may be mitigated or banished by nitrite of amyl.—*Lancet*, March 19.

ACONITINE IN SO-CALLED ESSENTIAL NEURALGIA.—Crystallized aconitine, when skilfully administered, constitutes one of the most powerful remedies in all cases of neuralgia where it has been found appropriate. The therapeutic indications are those of so-called "essential" neuralgia *sine materia a frigore*, or of rheumatic nature, especially facial neuralgia, and neuralgia of the trigemini, although it may assume the characteristics of inveterate *tic douloureux*. As to the mode of administering, clinical observation shows that preference should be given to the digestive organs Granules containing one-quarter milligramme of crystallized aconitine (for crystallized nitrate of aconitine the doses being the same) may be given. An interval of four hours should be allowed between each granule, the total quantity administered during twenty-four hours not exceeding one milligramme of the medicine. There are forms of obstinate facial neuralgia, however, which resist the action of aconitine alone, such as the intermittent forms, and these forms likewise resist the action of quinine alone. In such cases complete results are obtained by associating the two drugs. This is done in pills as follows: Hydrobromate of quinine, 10 centigrames; crystallized aconitine, one-fifth milligramme. One pill containing the above quantity of quinine and aconitine is administered every four or five hours.—*London Med. Record.*

THE TREATMENT OF DIABETES.—A paper was recently read before the Académie des Sciences, at Paris, by M. VILLEMIN, on a case of acute diabetes which had been treated by means of opium and belladonna combined. The patient was a young soldier, strongly built, and hitherto of good health, who had suddenly developed intense diabetes, passing twenty-five pints of urine daily with near two pounds of sugar. Two grains of extract of belladonna with one grain of extract of opium were then given, the patient at the same time being restricted to the usual régime for diabetic patients. In the course of a fortnight the quantity of urine was not much above normal, and the sugar had disappeared. Discontinuance of the treatment, even though the same diet was adhered to, was promptly followed by a return of the symptoms, which, however, as promptly subsided when the treatment was resumed. Later on he was allowed to return to the ordinary full diet for nondiabetic patients, but even then, so long as the opium and belladonna treatment (raised to 3 grains daily of each) was continued, no return of the polyuria

or glycosuria occurred. Under treatment the patient gained 18 pounds in weight. Without being over-sanguine, it would be interesting to see the result of this treatment in other hands. —*Med. Press and Circular*, March 30, 1887.

DR. J. MILNER FOTHERGILL ON THE NUTRITIVE VALUE OF BEEF TEA.—In the Therapeutic Gazette, June 15, 1887, DR. FOTHERGILL says: Beef-tea contains nothing which can form grape-sugar, and is, in fact, a pleasant stimulating beverage or food adjunct, but without food value practically. (For what food value it has is so infinitesimal that it is not worth counting). But when it has added to it a food such as lactated food, it has a distinct measurable food value. Consequently, such food should be given with beef-tea, and the compound forms of a valuable food.

When lactated food is placed in water hot enough to be sipped, a rapid transformation of the starch remaining in it (by the diastase it contains) goes on; and a nutritive fluid is the result, which requires but a minimum of the digestive act.

Such fluid can be flavored and drank as a nutritive beverage, specially acceptable in febrile conditions. Flavored with lemon, ginger, cloves, or other flavoring agents, to give variety —a matter far too much neglected in the treatment of the sick—it can be largely used. Or wine, either red wine, as claret, or sherry or port, can be added to it when a little stimulant is required, and brandy when a stronger stimulant is indicated.

THEISM—THE NEW NERVOUS DISEASE.—Attention has recently been drawn to a new nervous disorder said to be especially prevalent in England and America; it is called "Theism," or tea-drinker's disease. It is said to exist in three stages—the acute, subacute, and chronic. At first the symptoms are congestion of the cephalic vessels, cerebral excitement, and animation of the face. These physiological effects being constantly provoked, give rise, after a while, to reaction marked by mental and bodily depression. The tea-drinker becomes impressionable and nervous, pale, subject to cardiac troubles, and seeks relief from these symptoms in a further indulgence in the favorite beverage, which for a time restores to a sense of well-being. These symptoms characterize the first two stages. In chronic cases theism is characterized by a grave alteration of the functions of the heart, and of the vaso-motors, and by a disturbance of nutrition. The patient becomes subject to hallucinations, "nightmares" and nervous trembling. With those who take plenty of exercise, an habitual consumption often may be indulged in with impunity, but with women and young people who follow sedentary occupations this is not the case. The best treatment for theism is said to be indulgence in free exercise, such as walking and open air life.—*Jour. American Medical Association*, April 9, 1887.

PEPSIN IN THE TREATMENT OF CHRONIC TROPICAL DIARRHŒA.—In a recent number of the Indian Medical Gazette, MR. GEORGE HARRISON YOUNG reports three cases of chronic diarrhœa which had proved rebellious to the ordinary methods of treatment. In each of these cases the treatment was stopped, and the patient placed on a milk diet, and a half-pint being taken every three hours, and 5 grains of pepsin given four times daily. The record of his cases appears to show that great benefit was derived from the use of pepsin. MR. YOUNG states that he has now used pepsin in a considerable number of cases, and always with success. He claims that this mode of treatment is especially applicable to that form of diarrhœa in which the motions are large and frothy. These cases are due to insufficient digestion and secondary fermentation of the food. When this form of disease becomes established astringents are useless and often even injurious. Pepsin at once checks the diarrhœa. Only milk diet should be allowed and the pepsin may be given with the milk. In typhoid fever, the author claims that pepsin, by increasing digestion and assimilation of food, will thereby lessen the diarrhœa and intestinal irritation, and by so doing will diminish the severity of the disease. It is also useful in dysentery occurring in debilitated subjects.

YERBA SANTA AS A VEHICLE OF CINCHONA ALKALOIDS.—In malarious countries, where intermittent and typhoid fevers prevail, physicians cannot be indifferent to the many urgent requests of their patients to provide them with a remedy devoid of a bitter taste, and which can be taken easily. The peculiar properties of the yerba santa, in imparting to quinine the taste of starch when chewed and held upon the tongue a few seconds, has been long known to the old settlers of California, and it was a knowledge of this fact that first invited the attention of the medical profession to its power as an adjuvant. Given in the form of an elixir or syrup, yerba santa is a most excellent remedy for disguising the bitter taste of the alkaloids of Peruvian bark, as well as many other bitter drugs. The well-known bitterness of the cinchona alkaloids and salts form a great objection to their use, but when given in combination with either of the preparations above mentioned, in the proportion of ten to twenty grains to the fluid ounce, they are rendered palatable, or at least tolerable, are retained more surely by a delicate stomach, and can be frequently given in this manner without the patient's knowing anything of the nature of the remedy prescribed.—*Pacific Record of Medicine and Surgery*, April 15, 1887.

THE DIETETIC TREATMENT OF ECZEMA.—PROFESSOR SCHWENINGER (Charite-Annalen, xi; Monatshft. f. prakt. Dermat.) believes in dieting eczematous patients, but not after any hard and-fast general dietary laws. Each patient must be treated according to his case, and at first be put upon as simple diet as possible. When this basis is reached, the patient's taste is to be consulted and his diet made more varied, care being taken to avoid anything that is known to disagree with him. Sometimes it is advisable to have a patient increase the number of meals in a day, while decreasing the quantity of each one. Some patients do best on solid food alone, leaving out tea, coffee, and the like. Sometimes the best results are ob-

tained by having the patient eat of only one sort of food at a meal—whatever he fancies. In many cases of chronic eczema a liberal supply of water, or rather of fluid, is useful, and this not taken at once, but often in small quantities. Up to three quarts of fluid may be taken in this way. The addition of salt to the dietary is also useful.—*Journal of Reconstructives.*

CONDURANGO IN CANCER OF THE STOMACH.—Fifteen years ago there was introduced from Brazil a remedy which was claimed to be a specific for cancer. Since then, as before, other remedies have been similarly vaunted, and none have stood the test of experience. The remedy in question was condurango bark, of which a trial was made at the Middlesex Hospital, the negative results being read before the Clinical Society by Messrs. HULKE and DE MORGAN (Clin. Soc. Trans., vol. v). In Germany almost the only favorable report came from PROF. FRIEDREICH, who related instances of its value in gastric cancer. Since then it has fallen much into disrepute, having been regarded as little better than a stomachic, and prescribed thus with advantage (WILHELM, Year-book of Treatment, 1886, p. 49) in cases of carcinoma and ulcer. But DR. RIESS, of Berlin, has just published (Berl. klin. Wochensch., March 17) some striking testimony to the value of the drug in gastric carcinoma, more conclusive than any that has hitherto appeared.—*Med. Press and Circular.*

GLYCERIN IN THE TREATMENT OF ACUTE FEVERS.—Semmola prescribes glycerin diluted with water, to be taken in copious drinks during the whole day. At first 15 to 20 grammes for every twenty-four hours, dissolved in 400 to 500 grammes of water, to which are added a few spoonfuls of lemon juice or a few grammes of citric acid. The following is the formula: Pure glycerin, 300 grammes; citric or tartaric acid, 2 grammes; water, 600 grammes. Take 20 to 30 grammes every hour. This solution forms a very agreeable drink, and is not displeasing even to patients affected with fever. The stomach is in no way incommoded by the medicine, which has been given in doses as high as 40 to 50 grammes per day without producing intestinal derangement. Under the influence of this medicine the quantity of urea is diminished from 6 to 7 grammes.—*London Med. Record*, March 15, 1887.

ANILINE INHALATIONS IN PHTHISIS.—PROFESSOR KREMIANSK'S method (Journal, March 12th, 1887, p. 579) was recently tried by DR. NESTEROFF, of Moscow (Russkaia Meditzina, No. viii, 1887, p. 151), in the case of a lady suffering from consumption, whose condition was not at all such as to cause immediate apprehension; in fact, she was about to start for a southern health-resort. Under inhalations of aniline dissolved in oleum gaultheriæ, the patient's state grew rapidly worse; and after two weeks of the aniline treatment, she died. DR. NESTEROFF emphatically declares that he will never venture to repeat the experiment; he maintains that the method is not only useless but directly injurious.—*British Medical Journal*, April 9, 1887.

SUBCUTANEOUS INJECTIONS OF CITRATE OF IRON.—DR. MORI recommends very highly the hypodermic administration of citrate of iron in anæmia. In a pregnant woman with very marked anæmia great improvement followed daily injections of a syringeful of a one per-cent. solution into the gluteal region. At the end of two weeks the patient was pratically cured. In a pregnant woman eight injections sufficed to bring about a very great improvement. In a woman, fifty-four years of age, suffering from a very severe degree of anæmia, induced by hard work and poor food, twenty-five injections were required before any satisfactory amelioration was to be noted.—*Am. Practitioner and News.*

ENEMATA OF DEFIBRINATED BLOOD.—Cases in which enemata of defibrinated blood have been employed in the treatment of chlorosis and acute anæmia are reported by DR. VALERA in the Siglo Medico, and by DR. MARIANI in the Revista. DR. VALERA'S case was one of extremely severe post-partum hemorrhage, and was combined with the use of the cold douche. DR. MARIANI'S cases appear to have been instances of simple anæmia. In each case improvement is stated to have been rapid, and the recovery permanent; but the details as to the mode of administration, or the nature of the blood employed, are not given.—*Med. and Surg. Reporter*, May 7, 1887.

THE SUBCUTANEOUS ADMINISTRATION OF EUCALYPTOL.—M. JACQUEMAIRE, a Lyons pharmacist ("*Lyon Méd.*," Mar. 6, 1887), recommends the following formulæ:

1. Eucalyptol, 1 part,
   Oil of sweet almonds, 3 or 4 parts.

2. Eucalyptol, 1 part,
   Virgin olive oil, 2 or 4 parts.

—*N. Y. Med. Journal.*

AMYL NITRITE AS A UTERINE SEDATIVE.—This substance has, as is well known, been used with success as a palliative in cases of dysmenorrhœa. In a letter to the "Lancet," MR. F. W. KENDLE recommends it not only for that purpose, but also to allay the nausea of pregnancy and to check after-pains. For the latter purpose, he directs two-fourth grain capsules to be broken into a smelling-bottle, the patient to take two or three deep inhalations when she felt a pain coming on.

CITRATE OF IRON AND QUININE WITH CASCARA CORDIAL.—DR. CHARLES HADDOCK, of Beverly, Mass., commends the use of cascara cordial as a vehicle for the iron salts. He uses very largely the following formula:

Cit. iron and quinine, ℥ ii.
Cascara cordial,
Water, ää ℥ iss.

The Medical Age.

Vol. V. DETROIT, JUNE 10, 1887. No. 11.

Original Articles.

TWO REMARKABLE CASES—ONE OF HEMIPLEGIA AND APHASIA, AND OF CHOREA IN A NEGRO.*

BY J. J. MULHERON, M. D. DETROIT, MICH.

A case of Aphasia.—At about midnight of May 30th, of last year, I was awakened by the vigorous and repeated ringing of my door-bell, and on hurrying down to answer the call I found at the door a middle-aged gentleman of prominence in legal and political circles in this city, whose voice, face and the manner in which he was clothed all betrayed an unwonted degree of excitement. He would vouchsafe no explanation for his perturbation, but urged me to accompany him with the least possible delay. On our way to a notorious house of assignation where, he informed me, lay a dying woman, he explained his interest in and connection with the case. In returning from his office, a little after eleven o'clock that night, he was accosted by a woman whom, though unaccompanied at that unseasonable hour, he supposed from her appearance and demeanor was a lady, who explained that she had lost her way and asked to be directed to a certain street and number. As the place enquired for was in the direction the gentleman was going, he volunteered to accompany her and point it out. On the way a chance remark by his companion induced him to think that he might venture a response slightly more suggestive. The result was a repetition of the old, old story, and instead of the original destination, the establishment to which he was accompanying me was brought up at. It transpired that immediately after the object of their visit had been accomplished, the woman suddenly ceased talking, was seized with a slight, scarcely perceptible, convulsion and became unconscious. Thoroughly alarmed, the gentleman aroused the landlady, and with her resorted to all the means at their disposal to restore consciousness. Failing in their efforts my assistance was sought. I found the woman lying on her back with her eyes open and staring, and apparently conscious. In reply to my questions she would answer only "yes," and that with a sort of hissing sound, void of all labial modification. Suspecting it to be a case of hysterical aphonia, or, possibly, of malingering, I resorted to the various methods in vogue of eliciting a response, but without avail. I then asked in a determined tone, and loud enough to be audible to the woman, for a kettle of boiling water. This was prepared as soon as possible, and carrying it to the bed I bared the woman's breast, and threatened to deluge her with it. I became convinced from her conduct in this trying situation that it was a case of genuine aphasia, and without a suspicion of deception. I placed a drop of croton oil on the back of the tongue, and ordering the patient to be left alone, promised to return in the morning.

On my way out of the house, accompanied by our Lothario, we met in the hall a man who eyed us very closely, if not, indeed, menacingly. This individual developed later to be the woman's husband, and was unquestionably a party to the scheme of black-mail which the two had plotted. The plan evidently was for the woman to entrap a gentleman, and the man who was in waiting in an adjoining alley was to follow the twain and afterwards to appear in the *role* of the injured husband. Before seeing us he had been apprized of the illness of the woman, and that fact together with the fact that the gentleman was accompanied by a man larger than himself, probably prevented the intended scene at his meeting with the proposed victim. The appearance of the woman was not that of the usual street-walker, and, in all probability, the fact that she was "new to the business," by causing unwonted agitation and excitement had something to do with precipitating the attack.

I was recalled to the woman by a messenger who rung me up at 2.30 a. m, stating that she was extremely restless and asking for something to keep her quiet. My interest in the case was so great that I accompanied him to the house I found that the croton oil had operated freely, but the aphasia had not been improved thereby. In about five minutes after my arrival, while sitting by the bedside, the woman was seized with a violent clonic convulsion, which lasted about five minutes, as near as I could judge without actually timing it. After it had subsided, I for the first time noticed that the patient was afflicted with complete right-sided hemiplegia. Whether this supervened on the convulsion I do not know.

* A report prepared prepared for the Wayne County Medical Society.

I had not noticed it before, though it may have existed.

The patient was kept at the house for two days, when on showing no prospects of improvement, she was removed to St. Mary's Hospital, where she was placed under the charge of Dr. R. A. Jamieson, with whose kind permission I visited her from time to time for several weeks, during which there was no change in the symptoms. The treatment consisted of galvanism and large doses of iodide of potassium. She remained in the hospital about three months. I am informed that the hemiplegia had almost entirely disappeared, but that the aphasia was scarcely improved, she having added but one word, "no," to her vocabulary.

The subject of aphasia is peculiarly interesting because of the absence of definite conceptions of its nature among neurologists. It is recognized under two forms, the ataxic and the amnesic. In the ataxic variety the patient does not speak because he has lost the power of articulation; in the amnesic he has lost the memory of words and therefore cannot articulate. In the case reported the aphasia was ataxic, as it always is when complicated with hemiplegia. It has also been noted that when hemiplegia occurs in conneciion with ataxia it is always on the right side, which fact goes to show that embolism is most apt to affect the left side. Ferrier has pointed out that in aphasia due to disease in the left hemisphere, memory is not lost, nor is the person incapable of appreciating the meaning of words uttered in his hearing. In the case reported the woman apparently understood perfectly what was said to her, and the expression of her face indicated her desire to reply to questions.

Chorea in a Negro Boy.—Chorea is so very unusual among Negroes, in this latitude at least, that when one is discovered it should be recorded. I was consulted in March last by a colored woman who brought her son, aged ten years, to my office for advice and treatment. The lad was well nourished and very intelligent. He had commenced "making faces" about six weeks before, and the disturbance had gradually increased until he seemed to jerk in every muscle of his body. He was apparently unable to perform any voluntary act with his hands, and, his mother informed me, it was necessary at times to feed him. He gave no history of rheumatism, fright or any other disturbance, and the case seemed to be purely idiopathic. He had been removed from school, under the advice of the physician who first saw him. I placed him on Fowler's solution, five drops, to be gradually increased to eight and then again decreased to five. This he has been able to continue for nearly two months without any gastric disturbance, and he is now nearly well.

LAPAROTOMY FOR OBSCURE INTESTINAL DISEASE—RECOVERY AND CURE.

BY HAL C. WYMAN, M. D., DETROIT.

Mr. ——— aged 37 years, an iron worker by occupation, of good habits and health until 3 years ago, when he suffered an attack of typhoid fever which lasted about eight weeks, and which was characterized by several bloody stools.

Recovery, however, was prompt, and he gained in weight and strength all that could be desired. Once in 2 or 3 weeks after that he would have attacks of colic, in which the pain was limited to the neighborhood of the umbilicus and persisted until the bowels moved or there was a free evacuation of intestinal gas per ano. The pain would usually begin suddenly and was likely to be followed by bilious eructations, and in some instances vomiting.

Last November one of these attacks occurred which was severer than its predecessors. The pain which commenced then never ceased until the operation hereafter to be described was performed. The bowels were obstructed absolutely for several days. The general situation as related by the patient was extremely threatening. The bowels finally moved, but with little improvement in his condition. Diarrhœa soon set in, and had been more or less constant until I saw him in the following April. He was then greatly emaciated, like one in the last stages of consumption, for appetite had been very poor and solid goods if taken were almost certain to intensify the pain around the umbilicus. He was having bloody, mucous-dysenteric-stools every hour or two. A careful examination of the abdomen revealed nothing but an unusual degree of emptiness. The rectum appeared sound, except a marked paleness due to general anæmia. A tube was passed beyond the sigmoid flexure, meeting with no obsruction.

Because of the steady and severe pain in the umbilical region, the frequency and character of the stools, the progressive emaciation and the history of acute attacks of obstruction of the bowels, I advised abdominal section to ascertain the nature of the lesions I felt certain would be revealed. The patient had been ill so long and suffered so much that he had little hope of getting any better, and was reluctant to undergo any surgical procedures. He asked me if I would submit to such an operation, which I had explained to him was uncertain in its result, if I was as weak and as nearly dead as he. When I assured him that I would; that I felt that he could, as he was, live only a short time longer, and that the laparotomy would not shorten his life, he gave his consent. With the able assistance of Drs. Connell and Robertson I proceeded to operate. The patient was first thoroughly anæsthetized. His

abdomen was then washed with common soap and warm water and rubbed with a solution of corrosive sublimate in one pint of chloroform and camphor water as an antiseptic. Our hand and instrument were dipped in that solution. The incision was made in the linea alba, or as near it as I could easily get, and began about one inch below the navel and was two inches in length. As it proceeded through the abdominal wall all bleeding vessels were compressed with forceps, so that when the peritoneum was opened not one drop of blood could penetrate its cavity. My fingers were passed into the abdomen to explore its contents; a portion of the small intestine was found adherent to the colon for a distance of about four inches. This adhesion was separated by traction, and in bringing those parts of the bowel through the wound, several embound or ciccatrical masses were found on the ileum. The colon, at the point where the adhesion had occurred, was thickened, and the adherent part of the ileum was folded upon itself with markedly contracted lumen. All traces of blood, which had escaped in small quantity, were removed with warm antiseptic sponges. The abdominal wound was closed by three deep interrupted sutures, which were made to embrace the peritoneum in such a way as to bring perotoneal surfaces in apposition; and four small sutures between and either side of the large ones for the purpose of getting accurate union of the muscles and integment.

Recovery was rapid and uninterrupted. The pain around the umbilicus vanished. His appetite improved. Now, six weeks after the operation, he is well and sound.

A CASE OF NEURALGIA DUE TO ANÆMIA RELIEVED BY FOOD.

BY E. J. KAUFFMAN, M. D., NEW YORK, N. Y.

I have to report a case which, to my mind, is extremely interesting from the fact that a remarkable result was obtained by the administration of one of the many prepared foods that abound, and also as it shows how gross errors may be committed by men in the practice of medicine who are very busy and who, by reason of their limited time, are oftimes superficial and unconsciously careless. I do not think that any case where we have internal pain present can be diagnosed by merely a glance at the outside. The careful diagnosis of such a case requires time.

It is owing to this fact that the younger members of our profession at times find the older members in error, and pave the way for themselves to become busy practitioners, only themselves to commit the same error. To attribute such mistakes, committed by men of reputation, to inferior knowledge or lack of wisdom is folly and simply ridiculous, and failing to find the cause there, we ask the question, why? I seem to hear the echo whisper: Too busy! Too much to do, with only 24 hours from sun to sun.

Mrs. H., æt. 32 years, married, two children, presented herself for treatment on the eighth of last month, at my office, with the following history: Two years ago she suddenly experienced a severe pain in the left hip, which soon extended over the abdomen, but principally into the uterus and ovarian regions. The pain increased in severity to such an extent that in thirty minutes from the onset the patient was obliged to seek her bed.

Severe vomiting, preceded by slight, very slight, nausea now commenced. There was present a frequent desire to micturate; only a few drops of urine were passed at a time, and there was no scalding. This desire increased when the patient rested in the dorsal position and decreased when she assumed the standing or sitting posture. The patient for four or five weeks previous to this attack had been flowing constantly, was unable to eat and was extremely anæmic. Medical aid was sought, and the painful symptoms were checked by the administration of morphine. The case was diagnosed as "ovarian trouble." Shortly afterward the attending physician made a uterine examination, arriving at the conclusion that the uterus was misplaced, and that the frequent desire to urinate was due to that cause.

The physician in one examination corrected the misplacement (at least there is none now) and instructed the patient to use morphine whenever she experienced any pain or annoying symptoms. How well she knows the draught that has been steadily aggravating her condition and slowly leading her over the edge of an awful precipice! Since that first attack Mrs. H. has had many others, each one leaving the stomach in a worse condition. At the present date she is chlorotic, and her stomach absolutely refuses to retain any food.

As I wish to speak particularly of the remarkable effect produced on the stomach I will not go into detail and discuss the reasons for my diagnosis, but will refer to them in an article which I purpose preparing on "Anæmia as a Cause of Neuralgias."

My first aim in the case under consideration was to overcome the anæmic condition as soon as possible and give the stomach rest. I commenced with largely diluted doses of iron and some bismuth, but each and every time they were rejected. I then determined to abandon all drugs and give some prepared food, and selected Emerson's albuminoid food, it containing no medicine or digestive. I ordered two teaspoonfuls of this food given in cold water every three hours. The first four doses were rejected, the fifth was retained, the vomit-

ing ceased and I gradually increased the quantity, and at the end of five days the patient not having vomited once, I commenced the administration of drugs and light articles of diet. The food has formed the principal diet for the last three weeks. The anæmic condition is disappearing rapidly and the patient expresses herself as much better. No morphine has been given. No pain.

I am not apt to become enthusiastic nor form hasty conclusions, but never during an experience in European hospitals for some years and in private practice, have I seen such a result in so short a time from any drug that has ever been recommended.

THE CONTAGIOUSNESS OF CONSUMPTION.

BY WM. BUNCE, M. D., OBERLIN, O.

An article in the AGE of April 25th, by DR. PITCHER, of Detroit, on the Contagiousness of Phthisis, reminded me of the following cases which occurred in my practice, some eight years since.

A strong, healthy family, consisting of father, mother, five boys and five girls, all entirely free from any tendency, hereditary or acquired, to any disease whatever.

One of the girls, unmarried, aged 24, went to an adjoining town to teach in a union school, in place of a lady teacher who was sick with a bad cough—which proved to be due to tuberculosis. In addition to her duties as a teacher, she assumed the care of this sick teacher. In order to allay the violent paroxysms of coughing to which this sick girl was subject, some sort of a powder had been used in the throat by means of an insufflator. As a substitute for this device, the nurse placed the powder in a glass tube, from which she blew it directly into her throat with her own mouth, and thus inhaled, directly, the breath, often during a paroxysm of coughing.

In the course of a few weeks, she herself was taken with a severe cough, compelling her to give up her school. She came home, and placed herself under my care. A careful examination of the lungs revealed a slight consolidation just below the left clavicle, with an inflamed condition of the throat—strongly suggestive of a deposition of miliary tubercle, and I attribute the condition to contagion.

After a thorough course of local and constitutional treatment, in the course of six months, health was, apparently, restored. Some three years afterward, however, following a severe cold, a cavity formed in the left lung, and, after lingering along for nearly a year, she died of consumption.

While at home during her first sickness, and while under my care, her sister next younger, aged 22, and single, who had the entire care of her, used on her throat, without my knowledge, the powder above referred to, by blowing it into the throat, in the same way as had been done in the case of the sick teacher, often during a violent fit of coughing. The result was an infection precisely similar to that of her sister, but, unlike her sister, her disease continued unchecked, and she died in a little less than a year, of consumption.

A still younger sister, aged 18, took the entire care of the last patient, and became in the course of a few weeks infected in the same way, and died also of tuberculosis.

During this daughter's sickness, I accidentally saw the mother in the act of blowing with her mouth through a glass tube some of the powder into her sick daughter's throat, in order to allay a violent fit of coughing. I immediately stopped her, telling her the dangers of such a course, and that I supposed they always used a powder blower which I had provided for that purpose, and was horrified to find they had failed to use it.

I had previously ordered the free use of disinfectants, and that all excretions, with the sputa, should be buried.

The mother had already become infected, for she sickened and died with the same intensely congested throat and dreadful paroxysms of coughing, ending in destruction of lung tissue, and death from consumption.

After the mother's sickness the two elder sisters came home and had the care of the mother and the household, but were careful not to inhale the breath, and followed out my instructions in reference to the local applications to the throat. They both escaped infection, and are well to-day, as are also the father and two brothers, none of them having suffered from a cough (except from a slight cold), and have always enjoyed the best of health.

SOME NEW REMEDIES IN RHEUMATISM.

BY ZINA PITCHER, M. D., DETROIT, MICH.

In the fall of 1884, being called upon to treat a number of cases of rheumatism, occurring among the farmers and lumbermen residing in and about Kalkaska, a point in the northern part of the southern peninsular of Michigan, in which the heart symptoms were marked from my first visit, I became dissatisfied with the results under the usual line of treatment laid down in text-books for such cases. In spite of the most earnest efforts, the symptoms, especially the cardiac, remained obstinate. In many cases where the pain was severe and productive of much uneasiness because of its nearness to the heart, I found a decided intolerance to opiates. Casting about for a substitute I pitched upon piscidia erythrina, which proved itself to be truly an ex-

cellent remedy, especially in pain due to endocarditis, acting much better when used in connection with counter-irritation than the opiate, and having the additional good point in that it did not constipate the bowels.

Another remedy of good value to me under similar circumstances was the fluid extract spigelia, given in some instances alone, in others in connection with such old time remedies as colchicum, potassium bicarb., salicylic acid, etc. In cases complicated by peri-carditis, the results obtained from digitalis, convallaria majalis, cardiac sedatives in general, hydragogues, diuretics and diaphoretics were anything but encouraging. Entering upon an experimental course I used in the next case, a Mrs. T., aged 40 years, who had suffered for some time from rheumatism and chronic bronchitis, the fluid extract cactus grandiflorus, two drops to the ounce, and I gave one teaspoonful every twenty minutes. In one hour the patient was resting quietly. In this instance the distension of the peri-cardial sac was great, and the pain and dyspnœa were frightful. Much of the dyspnœa could be accounted for by a laryngeal trouble (cough). Hyoscyamus in full doses did much to relieve this. After an hour, as before stated, finding the patient resting quietly, I gave directions to use a teaspoonful of the cactus mixture every hour, and only to return to the twenty minute system upon a return of the alarming symptoms, and left. The following morning I found her resting comfortably, the area of distension diminished, the pulse materially reduced and the dyspnœa a minor factor in the case. Upon enquiring as to what had occurred during the night the attendant stated that the patient had "literally drenched the bed" so profusely had she perspired. From this time on the recovery was steady, an occasional resort to hyoscyamus to check the cough and a bitter tonic later being all that was required. Since that time I have used the cactus in a large number of cases and found it invariably a valuable remedy; and particularly so in those cases where the distressing symptoms were due to an effusion into the peri-cardial sac. This may be a matter of ancient history, but inasmuch as I have never seen it in any periodical coming under my observation, I make bold enough to publish it.

RECENT ADVANCES IN PREVENTIVE MEDICINE.*

BY GEORGE H. ROHE, OF BALTIMORE, MD., PROFESSOR OF HYGIENE IN THE COLLEGE OF PHYSICIANS AND SURGEONS.

Progress in any branch of science or art may be measured either by the number and character of new discoveries made, or by the gradual advances in the application of knowledge previously acquired. Judged by either of these criteria the record for State Medicine during the past year is a creditable one.

In the field of epidemiology and endemiology, the progressive extension of the fifth great pandemic of cholera first claims attention. Extinguished in the portions of Italy, France, and Spain ravaged in 1885 and 1886, it has slowly invaded southeastern Italy, Hungary and other Austrian possessions, and has been imported into South America, whence it threatens the United States by several routes. The danger of invasion of this country is at present greater than at any time within the past three years.

Yellow fever inoculation, as practised by FREIRE in Brazil, and CARMONA in Mexico, has claimed a large share of the attention of sanitarians during the year. The claims made in favor of this method of preventing this scourge are now being subjected to an official investigation authorized by the United States government.

Diligent search has been made for the specific organism supposed to be the infective agent in vaccine virus, but without definite success. The results obtained are not entirely negative, however, and one may cherish the hope that a solution of this problem will soon be reached.

The relation of a peculiar disease of cows to scarlet fever, and the discovery of a specific microbe in the blood in the latter disease have attracted much attention. The restriction of scarlet fever will doubtless be more thoroughly effected so soon as physicians are convinced of its bacterial nature, and clearly comprehend its mode of transmission. Statistics are given showing what has already been accomplished in this field.

STERNBERG, FRANKEL and WEICHSELBAUM, have studied the specific microbe of croupous pneumonia, which the former regards as identical with his micrococcus Pasteuri; in which opinion both the other authors mentioned coincide. DR. BAKER, of Michigan, has also shown that croupous pneumonia seems to be dependent upon a cold, dry atmosphere.

Measures for the restriction of pulmonary tuberculosis are adverted to. Tuberculous patients should not be treated in the same hospital wards with non-tuberculous individuals, and prompt disinfection of the sputa and other discharges should be practised in order to diminish opportunities for infection. General sanitary measures should, however, not be neglected in the warfare upon the bacillus. There is danger that a too exclusive attention to the microbian factors of disease will narrow our views of epidemiology and preventive medicine.

*Abstract of the address in State Medicine delivered before the American Medical Association, at the thirty-third annual meeting held at Chicago, Ill., June, 7-10, 1887.

It seems to be established that the micro-organism discovered in the intestinal lesions and discharges in typhoid fever is the cause of this disease. The fact that this microbe may preserve its vitality for a considerable time in water and ice has been shown by BOLTON, WOLFHUGEL, PRUDDEN and others. This, together with the well-known history of outbreaks of this disease, undoubtedly depending upon pollution of drinking water, should make prompt measures of disinfection imperative in every case. The physician fails in his duty who neglects measures for the thorough destruction of the typhoid infection existing in the intestinal discharges.

The importance of disinfection of bedding, clothing and other personal and household articles in contagious diseases demands that health authorities should have under their control establishments where disinfection can be carried out on a large scale and at public expense. Such institutions are now in use in Berlin, Düsseldorf, Göttingen, Strasburg, Breslau, Leipzig, Danzig, and other cities in Europe. The results are pronounced to be exceedingly beneficial. Steam under pressure is regarded as the best disinfecting agent.

Quarantine, a word which for more than five centuries has been synonymous with barbarism, is becoming under modern methods a safeguard to the public against infection and an advantage instead of obstruction to commerce. The results achieved at the model quarantine station at New Orleans encourage the hope, and almost warrant the prediction that the days of the quarantines of detention, whether by sea or land, are past, and that quarantine in future will mean simply thorough disinfection of fomites, and, of course, effective isolation of persons already infected.

Cremation of garbage seems to be the best method yet devised for the inoffensive destruction or final disposal of solid city wastes.

The irrigation system of sewage disposal has steadily won favor. In Berlin, Breslau, and Danzig, in Germany, Birmingham in England, and Pullman and other places in this country, it has been in successful operation. Chemical precipitation and purification of sewage has also been adopted with satisfactory results in various German cities. A board of distinguished engineers recently recommended the same system for the city of Providence, R. I.

PROFESSOR VAUGHAN'S discovery of a very poisonous ptomaine in cheese, ice cream and milk undergoing certain chemical changes has been confirmed by a number of investigators in various parts of the country. Vaughan's suggestion that tyrotoxicon may be found to be the poison which produces cholera infantum opens up a new field for investigation in which every physician must of necessity be interested.

Analyses of food and drugs made during the year in Massachusetts and New York, show the wide extent to which adulteration is practiced and how the people are defrauded. Among the most startling instances are olive oil, of which 68 samples out of 91 were spurious. Vinegar was adulterated in 79 samples out of 116; mustard 124 times in 211; white pepper 63 times in 128; black pepper 41 times in 71; mace 29 times in 45. Of nine samples of horseradish examined only one was found genuine. A precipitate of uncrystallizable sugar and coloring matter and chloride of tin (poisonous) is sold to candy makers for making confectionery. Citrate of iron from respectable manufacturers contained 3½ per cent. of quinine instead of the 12 per cent. demanded by the pharmacopœia. Authority and means should be given to the health authorities to protect the public from these frauds, many of which are a source of danger to life and health.

Statistics collected by the speaker show that five-sixths of the inhabitants of cities in this country have no facilities for bathing except such as are afforded by a pail and sponge, or an easily accessible river, lake or other body of water. The establishment of public baths is urgently recommended both as a sanitary as well as a moral measure. Tub or pool baths are objectionable both on account of expense and lack of privacy in the latter. The spray baths in use in the German and French army barracks are recommended. These are not expensive, either in first cost or administration, and allow each bather absolute privacy and the opportunity for a thorough cleansing in clean water. Public baths should be open the year round, and not only during the summer.

A number of instances are grouped together showing how the enforcement of appropriate sanitary measures has saved life. In Michigan the saving of life from one disease (scarlet fever) has amounted during the last eleven years to 4,718 or 338 per year. In 1886, appropriate sanitary measures saved the lives of 298 persons who would have died of diphtheria, if such measures had not been enforced. In England and Wales, the average annual saving of life due to sanitary measures has amounted in the five years ending 1885, to 62,000. In Baltimore, a marked reduction of deaths from infectious diseases has followed the enforcement of certain sanitary precautions. In Memphis the death rate has been reduced in six years from 35 per thousand to 23.80 per thousand. In Chicago the reduction in mortality in the last five years has been from 25.69 per thousand to 19.46 per thousand, a net saving of 17,214 lives in that city during that period.

While all advances in sanitary administration have doubtless contributed to produce these good results, the main influence is to be attributed to three factors. These are *compulsory notification of infectious diseases; prompt and*

effective isolation of the sick and infected; and thorough disinfection of all infected articles and sources of infection. These must be the watchwords of the practical sanitarian of the future.

Correspondence.

THE COUNTRY VS. THE CITY DOCTORS.

Not long since, in consultation, a noted specialist said to a patient that it was doubtful if country doctors were so sharply posted as city physicians concerning special diseases. However true the remark may be, I think it is unprofessional to twit us, although indirectly, about our misfortunes. What advantages have city more than country physicians, that will sustain their assumption of superior qualifications? Let us compare notes and see if we can classify by locality. "Blue blood," for a basis, will hardly prove a tenable card, as we know where most of our city cousins were born. An educational claim appears weak, as hospitals, post-graduate courses and vogages to Europe are alike open to both.

It is possible that city doctors have a larger number of patients, but this theorem is doubtful, and if true, beyond certain limits experience decreases in value *pro rata* to numbers.

The value of hospital practice, where twenty or more patients are examined and prescribed for in an hour, compared with private practice, with only one or two, needs no elaboration to make the difference appreciated, and my observation has taught me that, aside from the staff, city doctors do not walk the hospitals very persistently.

I am not disposed to decry the value of great medical centres of instruction, especially to students or novices in medicine, but after they have mastered the science of medicine, and after they have learned the manner of examinations and the handling of instruments, one responsible case in private practice becomes pre-eminently more useful.

The overweening confidence of the public concerning hospital treatment is no measure of its value. To the medical staff who get advertised; to the student who needs clinical obser vation, and to the poor who can get nothing better, the hospital is desirable.

Of medical literature, there may be larger libraries in the city than in the country, but small libraries, well read and properly digested, excel for practical purposes. City specialists, in the line of their specialteis, undoubtedly have more experience than the general practitioner, but there are country specialists. City doctors who find anything novel and interesting, immediately publish a book, or a paper for the club or the journal, and country doctors buy them and read them. If we consider physical endurance, then, manifestly, the country doctor is not overshawdowed. If I should multiply the comparisons, it is possible that two classes of doctors, graded by locality, might be made; perhaps the advantage would inhere to the country. Comparisons are said to be odious, and I dislike the snobbery resulting therefrom, whichever way it might result. In our profession there is, indeed, a top and a bottom round to the ladder, and few there are who reach the top; nor am I willing to concede that the successful climbers all drift to the city.

Pertinent to this subject, but somewhat different in tenor, a general description of the status of the profession in this locality may be interesting.

Springfield, Massachusetts, within a radius of ten miles, is the center of a population of 100,000. It is as full of doctors as the heaven is of stars, and like them they are of the first to the twelfth magnitude.

Besides the general practitioner there are several specialists. There are also a vast horde of migrating mountebanks, lecturers, etc., feeding sawdust to the hungry public. We have also a growing novelty-class of practitioners. They are regular and irregular, but they come all the same for the purpose of visiting their "uncle" and of spending a vacation for rest. I have known them to remain in a restful attitude from one to three months, performing surgical operations and attending the suffering public, thereby relieving their over-worked brethren from too much business and plethoric pockets. Six specialists attend to the eye, or ear, or both, each one striving hard for the top round.

Within a half dozen years five eye and ear doctors have come and gone, each one, apparently, imbued with the idea that he was to be the luminous orb of an advanced education.

There are no "made" specialists in other departments of medicine among the regulars. A few may have drifted, by taste or skill, into surgery, midwifery, etc., but are not "exclusivists."

The public, afflicted with diseases of the nose, the throat, the lungs, the skin, ovarian disease, cancers, rectal troubles, *et id genus omne*, must rely upon the general practitioner, or flee to a specialist in some more favored locality.

Of course, we have Homeopathy-as-now-practiced, Electropathy, Compound Oxygen, Health Lift, Faith Cure, Christian Science, Uriscopia, and each has a following. I think the churches and temperance societies have all been taken up, but the field is open and has not been worked among the great political parties. To such, who have designs upon this place, it is worth while to consider the democratic, republican and mugwump parties as legitimate agencies to be utilized.

W. W. GARDNER, M. D.
SPRINGFIELD, MASS.

SUCCESS—MISTAKES.

The majority of people care nothing about fame; they even affect to ridicule it. So far, so good. But the majority certainly would like to attain success in life—a result which attends the efforts of so few.

Great or successful men are so from, virtually, two reasons: 1. They commit no blunders—this is a negative road to success. 2. They take steps in advance; or, in other words, seize and know how to profit by the golden opportunities—the chances that may never come again. Some, by the force of genius, create opportunities, by foreseeing events.

But let us not think of these noteworthy men, but come down to every-day life. Why are so many mortgaging their properties; why do medical men complain of competition, and of quacks cutting into their business? The result must, we think, be sought for outside of each man's line, entirely: If you do not succeed in farming or in medical business, throw it up entirely, and go boldly into something else. At some future, more auspicious time, you can return to your old business. But you may find that in ten or fifteen years you may be so much bettered that it is not worth while to return to the old stand.

Regarding questions of detail, a great deal depends on the man himself. Many overestimate their smartness, and thus commit serious errors of judgment. Financial errors frequently are seen, as taking worthless notes for payment, or endorsing somebody else's note. This last exploit is almost sure to be disastrous. Lending money—the height of idiocy; mortgaging your property, extending your facilities of business before it is proper time to do so; these are only extending facilities for your ruin.

If you want money for any special purpose, wait till you earn it; then you have got it, and it is not somebody's else's, covered by a note or mortgage, the payment of which will come due as sure as the sun will rise.

The form of government you live under matters naught; men rise from poverty to the highest places under government's autocratic, as well as in republican systems. It is the ne'er-do-well that never gets along.

Education is of very little assistance in worldly success. A millionaire may not know how to spell. Still he may found universities and be a power in the land. Perhaps the most potential way to success is to be honest. Pay your debts promptly. Then other people will do your advertising. This is assuredly a cheap road to renown, besides saving advertising expenses, which form quite an item. If you pay as you go, you can serenely contemplate those who are compelled to mortgage their property, and have no cause to envy those richer than yourself, because you will soon be up to them. Doctors, like others, should pay their debts.

C. E. NELSON, M. D.

NEW YORK, N. Y.

OPHTHALMIC MATTERS IN BERLIN.

A sojourn of several days in Berlin, during which time I was most handsomely entertained by PROF. HIRSCHBERG, may not in itself be particularly interesting to your many readers, nor can I offer anything unusually so from a medical standpoint, though it will be of interest to many to know that PROF. HIRSCHBERG, intends to attend the Congress at Washington in September, and visit the West. We hope to have him in Detroit for a short stay and he has partly promised to make me a visit.

The most interesting feature of his clinic, to the general practitioner, was, probably, the treatment of ophthalmia neonatorum, of which he had 12 or 15 cases. Two of the cases were twins and each case had its own brush (he uses camel's-hair pencils); to designate them he tied a blue ribbon on the arm of one and a pink ribbon on an arm of the other. His treatment is the same that I have taught in our school, and that I have written and talked about in our societies and journals so much during the past 20 years, viz. a 5-to-10-grain solution of argent. nitras, applied to the everted lids, once or twice a day. Keeping the lids anointed to prevent retention of the secretion in the conjunctival sac.

Like myself he thinks eyes should not be lost from this disease when this treatment is commenced early. No cold applications for PROF. HIRSCHBERG in these cases, and none for me.

PROF. HIRSCHBERG is a strong believer in asepsis. He does not go out to operate, but compels all cases requiring his attention to remain in his Augen-Klinik, where, as he says, he is "king, and nobody shall dictate to him." And he operates upon all septic cases in an operating room far removed from his cataract and iridectomy operating room. For each cataract patient he had a different set of instruments, all of which are first put into a bath of strong (1-1000) solution cor. sub. then in a weaker (1-10000) solution from which they are taken as used. He uses glass and porcelain baths for the instruments, and is very careful in everything pertaining to cleanliness His results are fully as good as those obtained by others who have not the facilities for so thoroughly carrying out aseptic ideas. Judging from his patients, there is need for it all, in many of his cases notwithstanding the fact that soap and water is cheap in this country.

He is a firm believer in the theory of rest and dark room after the capital operations on the eye, and laughs at the new method (?) of

rooms shaded slightly but not darkened, which was advocated many years ago by BEER.

I am now on my way to Vienna, thence to Paris. If I find anything of interest will let you have it.

EUGENE SMITH, M. D.,

BERLIN, GERMANY.

CACTUS GRANDIFLORUS.

On April 1st., Mr. P. brought his wife to see me. She was complaining of violent pain in the left side of the chest ranging up to right shoulder, with frequent papitations, pain in back, urine scanty, high colored and with lateritious deposit, pulse slow and feeble, bowels constipated, skin rather dry but no fever, appetite good and food well digested. I could detect nothing abnormal in the sounds of the heart and there was no increase of dullness. She was debilitated somewhat. low spirited, and unable to do her work regularly. I gave her a pill of aloes, rhubarb, iron, soap and iodide of potass., to be taken three times a day for the costiveness, fl. ext. gelsemium to be taken when the pain in chest was very severe, and 20 gtts. fl. ext. cactus grandiflorus every 4 hours. To report in a week. Her husband came at the specified time for a renewal of the medicine, delighted with his wife's improvement. He stated she had had but one attack of severe pain since she commenced taking the medicine, which was relieved by the gelsemium, though it gave her violent headache. Urine natural, no palpitation, and she was able to do her work; mind brighter, and in better spirits than she had been for months. I gave him another supply of cactus, with directions to report again in a week, unless his wife was so much improved as to render it unnecessary. I have not heard from him since, and I conclude she is well.

J. B. MAYS, M. D.

PERU, FLORIDA.

PICHI IN DYSURIA.

ROBERT NELSON, colored, laborer, was afflicted with dysuria to such an extent that he assumed the semi-erect position when urinating. The desire to urinate was experienced about every fifteen minutes, and so great was the pain and distress that NELSON was compelled to stop work. In this condition he presented himself to me. I placed him on twenty drops of pichi, fl. ext., twice a day. In four days he could stand erect, and urinate without pain or difficulty, and the quantity, instead of being a few drops, is half an ordinary teacupful.

In other less acute cases I have also used pichi with gratifying success. It can be proved clinically, first that pichi is a diuretic, second, that it has a prompt, decided effect on dysuria.

J. H. DEWOLF, M. D.

BALTIMORE, MD.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JUNE 10, 1887.

Editorial.

SUCCESS.

DR. NELSON'S note, in our present number, refers, in a somewhat jerky way, to the end which every true man has fixed as his goal, and to some of the means to this end. We apprehend that the criterion of success varies very little in all the professions of men. Occasionally a dreamer proclaims that the true success is the consciousness of having, in his own estimation, done well his part, let the result of his doing be what it may. It is, doubtless, a happy frame of mind which enables or permits a man to honestly feel this, but so few are built that way that the occasional one who attracts attention, does so only to become the butt of good-natured ridicule. Few physicians, for instance, we take it, should consider themselves "successes" by having gained the unanimous verdict of being skillful practitioners and estimable men if their incomes were insufficient to permit an establishment in keeping with the demands of what is by general assent, recognized as good or refined society. The social standing of the profession in this country is second to that of no other calling, but it cannot be maintained by the individual, no matter what his inherent qualifications, if his most god-like efforts on behalf of suffering humanity are not followed by adequate pecuniary returns. The criterion of success is money, and no man is successful, in the accepted meaning of the term, who does not put money in his purse. This assertion will strike many as not a little harsh, but it will stand a very careful analysis.

As the world goes it is pecuniary success, provided, of course, that it be honestly attained, which fixes a man in the esteem of his fellows. Medicine is, without a question, one of the most honorable of human vocations, but other things being equal, on the score of honesty, sobriety, and intelligence, the man who has put money in his purse commands the greater respect of the community, and that, too, regardless of the fact whether or not he be a

physician. Physicians themselves (being men of like passions with men as they go) measure success by the size of a man's bank account, and that, too, whether this account has been credited through the writing of prescriptions or fortunate business ventures. So generally accepted is this standard that physicians are seldom content to trust to the savings of the surplusage of their receipts over their expenses, to create this account. The result is that in most communities the most "successful" practitioners are very generally interested in outside ventures. In this city a very large proportion of them "dabble" in real estate, and we venture to assert that there are none of them who would exchange the profits from a fortunate turn in the market for the reputation or even "the inward satisfaction" which follows a successful operation or the happy effects of a prescription. Reputation and "inward satisfaction" as a result of professional service, are very nice things to have, but unaccompanied by what JOHN HUNTER was pleased to call "the damned guinea" they would not be exchanged, by very many, for the "inward satisfaction" which attends a rise in real estate.

DR. NELSON'S suggestion that the man who has demonstrated his lack of the qualifications for success in the practice of medicine, should cast about for some other calling, has in it the food for much thought. It is a mistaken conception of the duty which he owes the profession which keeps a man in that profession in spite of his failure to achieve what is, by general assent, regarded as success therein. A man's first duty is to himself. The profession will not suffer by being made of secondary importance. In fact, he serves his profession best who serves himself best. We know men who harp much on the string "duty to the profession," the loss of whom the profession would scarcely feel. When they die the profession will scarcely feel the shock of their demise and in a brief time the gap created by their removal will have been filled in and the old profession will go marching on just about as it used to. The persistence of many men in the practice of medicine does the profession but little good, while it deprives some other useful callings of members who would embellish them and at the same time serve their individual selves to much better profit. Let every man be honest with himself, and when he has become convinced that he has made a mistake in his calling let him be bold enough to try something else. The general following of this advice would soon relieve the profession of the overcrowding of which complaint is heard on every hand.

AN EXPERIMENTAL RESEARCH UPON RABIES.

DR. HAROLD C. ERNST, having received two rabbits which had been inoculated in PASTEUR'S laboratory, undertook to prove experimentally the following propositions:

(1) Is there a specific virus in the brains and cords of rabbits inoculated with PASTEUR'S material and after his methods?

(2) Does the treatment by drying, proposed by him, modify the strength of this virus? And, finally,

(3) Does injection with such "modified virus" produce an immunity against an inoculation (or bite) with virus of full strength?

His results with experiments in detail appear in the April number of the American Journal of the Medical Sciences. DR. ERNST began the investigation as a skeptic, but his experiments seem to justify a change from skepticism to a belief in, at least, a portion of PASTEUR'S assertions.

The conclusions which ERNST draws from his experimental work he summarizes as follows:

I. There exists in the cords and brains of animals inoculated in PASTEUR'S laboratory a *specific virus*, capable of the production of similar symptoms through a long series of animals.

II. That these symptoms are produced with absolute certainty when the method of inoculation is by trephining the skull, and injectioh under the dura mater, with less certainty when the inoculation is by subcutaneous injection.

III. That the strength of this virus is lessened when the cords containing it are removed from the animals and placed in a dry atmosphere at an even temperature.

IV. That the symptoms produced by the inoculation of this virus only appear after a certain period of incubation, distinctly shorter when the inoculation has been done by trephining, than when done by subcutaneous injection.

V. That injections of the virus, modified in strength by drying, and in the manner prescribed by PASTEUR, exert a very marked protective influence against an inoculation with virus of full strength.

VI. That a very moderate degree of heat destroys the power of the virus entirely, whilst prolonged freezing does not injure it.

As will be seen, all of these conclusions are in complete accord with the declarations of PASTEUR; their importance lies in the fact that they were reached at a distance from him, and by work entirely separated from any personal influence or bias.

ACTION OF BLACK HAW ON COWS.

We are in receipt of a communication on the subject of the anti-abortive properties of vibur-

num prunifolium, which though somewhat out of the line of articles submitted to medical journals is, nevertheless, very instructive, as being corroborative of the claims made for the action of this drug on the female of the human species. The communication is from MESSRS. S. S. BROWN'S SONS, breeders of blooded cattle at Galena, Ills. In 1885 this firm lost five calves by abortion, out of a herd of twenty-seven short-horned cows, and in 1886 eleven calves were thus lost to them out of a herd of twenty-nine. Since then they have been exhibiting black haw, and during the present season out of a herd of thirty, eleven of which were threatened with miscarriage, they have lost but one calf. In the case of three animals similarly threatened the drug was omitted, with the result of loss of the calf in each instance. They have noted the fact that the period of gestation was prolonged through the use of the drug to from two-hundred and ninety to two-hundred and ninety-two days. The amount of the drug administered was one ounce of the fluid extract (P. D. & Co.) three times a day. When it is considered that the loss of one of their calves means a loss of from $150 to $300, the pecuniary value to them of this effective drug can readily be estimated. Although considerable has been written touching the effectiveness of viburnum prunifolium in the direction indicated, the profession does not, we believe, properly appreciate the importance of this article. Doubtless, this is partially due to the indifferent nature of the preparations exhibited. MESSRS. BROWN'S SONS state that they have employed preparations which were attended by no appreciable effect, but that the employment of the proper article was invariably beneficial. It is, of course, of the first importance in determining the value of any drug that a reliable preparation thereof should be given, and in the case of one which is comparatively new this importance is enhanced.

THE INDEX MEDICUS AND THE MEDICAL PROFESSION.

The profession are familiar with the history of the struggles of the Index Medicus, a journal indispensable to a proper utilization of the periodical literature of the world. They know, too, that but for the enterpise and liberality of our townsman, MR. GEORGE S. DAVIS, this publication would have been suspended, and thus an incalculable loss sustained. We are pleased to note in this connection such expressions as the following, by the Tennessee State Medical Society, and are convinced that it but voices the sentiments of progressive physicians everywhere. The resolution was introduced by DR. J. BERRIEN LINDSLEY, Secretary State Board of Health, and was unanimously adopted:

"WHEREAS, The medical profession of this country has for years taken a great interest in the permanent establishment of the Index Medicus, first published by LEYPOLDT, of New York City, in 1879; and

"WHEREAS, By the death of this public-spirited friend of science and literature, the current cyclopedia book of reference was in *articulo mortis;* and

"WHEREAS, MR. GEO. S. DAVIS, Secretary of the firm of Parke, Davis & Co., Detroit, Mich., at the earnest solicitation of medical editors and writers in all parts of the world, undertook to keep it alive; therefore be it

"*Resolved* That the Medical Society of the State of Tennessee do hereby express its high appreciation of this liberal aid given investigators everywhere, and earnestly hope the profession will not allow the final effort to maintain a great periodical, which has reflected special credit on American medical science, to fail because of indifference and niggardly support; also,

"*Resolved*, That a copy of these resolutions be transmitted to MR. GEO. S. DAVIS by the Secretary of this Society."

Notes.

It is asserted by some eminent neurologists, says the Medical Record, that hysterical women under sexual or other excitement, exhale an agreeable odor, and a French writer declares that in early youth many women exhale a perfume whose entramament extends even to the clothes which they have cast aside for the wash, the perfume being butylic acid. Our practical contemporary denies this perfume-wafting power of the human female, and maintains that the clothes they cast aside for the wash are more likely to be redolent of the odor of sweat and leucorrhœal discharge than of emanations for Araby the Blest. It holds further that those who claim to have observed an agreeable odor in women under sexual excitement are liable to the accusation of suffering from subjective disturbances at the time. This is an exceedingly interesting topic, and we regret our lack of qualification to participate in its discussion. Facts bearing thereon, from the observations of any reader, will be thankfully received.

Medical News: The desire of praise belongs to man in common with many of the inferior animals. The education of some of these animals is chiefly effected by appeals to this desire, rewarding, for example, the dog, when teaching him to retrieve, by kind words and possibly some food dainty; or the horse, when teaching him to stand without hitching, in a similar way. It is also of large application in educating the child. It furnishes one of the most powerful motives to industrious, philanthropic, or heroic action, on the part of the adult, no matter in what calling he is engaged. The physician is by no means exempt from the ambition for reputation; and although MILTON did refer to fame as the last infirmity of noble minds, it is one of the most powerful means, not only in advancing his influence and capa-

bility for doing good, but of promoting the interests of the profession.

At a banquet given to MR. THEODORE METCALF, by the Boston Druggists' Association, OLIVER WENDELL HOLMES gave his opinion of apothecaries, as follows: I have always had a great opinion of the medical advice of apothecaries. The truth is, they put up the prescriptions of all the best physicians in the place in which they live, and they have the very cream of all their wisdom at their fingers' ends. So, when I have myself been suffering from any slight bodily inconvenience, I am ashamed —or ought to be, perhaps—instead of going to a professional brother, I have quitely crept into the back room and asked MR. METCALF what such and such a doctor was in the habit of prescribing."

The "Autocrat" has never been regarded as an eminent therapeutist, and if his diagnosis of his "inconvenience" was correct he showed good judgment in trusting to "such and such" good doctor's prescription. The serious objection to the counter prescribing by druggists lies in the ignorance of diagnosis on the part of those gentlemen.

From Plattsburg, N. Y.: On the morning of the 24th ult., just as early dawn began to lighten up the eastern horizon, there came a pull at the Dr's door-bell, cling-a-ling-ding ding—"Is the Dr. at home?"—"Yes. What's wanting?"—"Woman sick."—"Where away?" —"On the Battery."—"What's the name?"—"Smith."—"How about pay?"—and quick as thought the reply came, "that's enough, I don't want anything more of you sir; I pay my bills;" and off the caller went as angry, to all appearance, as if the doctor had hit him with a club. It is needless to add, that the doctor, who by the way, is not a junior practitioner by any means, returned to his couch much pleased with the result of his asking "how about pay?"

To many of our readers the news of the death of DR. THOS. F. ROCHESTER, of Buffalo, will come as that of the death of a dear friend. He died at his home on the 24th ult., of Bright's disease. DR. R. was born in the year 1823, and was graduated from Geneva College. He settled in Buffalo in 1853, and was appointed to the chair of principles and practice of medicine in the University of that place, which position he continued to hold to the day of his death. He combined a profound knowledge of medicine with a high order of manhood, and was, therefore, an ideal physician.

An instance of early paternity and one of early maternity have recently been reported. A correspondent of the British Medical Journal vouches for the correctness of the statement that a boy thirteen years and four months of age successfully impregnated a woman. The Journal says that this beats all previous records, the next lowest being fourteen years. The case of early maternity comes from Michigan. A girl in the northern part of this state recently gave birth to a child at the age of twelve years and two months. This case is, we believe, without a parallel in northern latitudes.

On the last Saturday in March, 1861, in the town of "Ti," N. Y., there came to the house of a hardy young farmer, by his second wife, their first born—a son. The same thing happened to them on the last Saturday in March, 1862, and the same again on the last Saturday in March, 1863, and as the family attendant removed to a distant part of the State in August, 1863, he has no record to show that the same thing has not been going on with equal regulation ever since.

"What about the Monroe doctrine?" was asked a village candidate. "Oh, well, now," said he, "thar's jest as good doctors now as thar ever was. All this talk about Bright's disease and Monroe's doctorin' is nonsense. DR. BUCK, standin' thar, is as good a doctor as any of 'em."

The new editors of the Medical and Surgical Reporter are DRS. N. A. RANDOLPH and CHARLS W. DULLES. The names are already familiar to medical readers, and we trust that they will find the new field an agreeable and profitable one.

Book Notices.

A TEXT-BOOK OF PATHOLOGICAL ANATOMY AND PATHOGENESIS. By ERNST ZIEGLER, Professor of Pathological Anatomy in the University of Tübingen. Translated and Edited for English Students, by DONALD MACALISTER, M. A., M. D., F. R. S., Fellow and Medical Lecturer of St. John's College, etc. Three parts complete in one volume.
New York: Wm. Wood & Co.
Detroit: John Macfarlane.

This book, of nearly 1,100 pages, describes and represents with unsurpassed fullness and clearness the changes in the various tissues and fluids of the body caused by the various diseases to which they are subject. A minute knowledge of these changes is too apt to be regarded as non-essential by the practitioner—pathology occupying a similar relation to his education, to that of the dead languages in the education of the layman, it being held as the correct thing to have studied such, but in after years they are regarded as a sort of mental gymnastics, the benefits of which are rather indirect than direct. Unquestionably there are many excellent practitioners who are very rusty in their pathology, as there are many excellent scholars whom a line in Virgil with which they

were once familiar, would now stagger. While this is a fact, it is none the less a fact that, other things being equal, he who keeps up his proficiency in the essentials to his graduation is the best practitioner. The reader who gives active rather than passive assent to this proposition, and who renews the oft-broken determination to review the studies of his college days, will find in the book before us an unsurpassed, if not, indeed, an unequaled, aid in the direction of pathology. The work is profusely illustrated, containing two hundred and eighty-nine wood-cuts, which, with the lucid and even interesting style of the translation, will bring the subject within the ready comprehension of even those who have become "rusty." The work of the translator has been admirably done, and is singularly free from the clumsy expressions which are apt to occur in translations from the German. The manner in which the translator has supplemented the work of the author, by additions and modifications, has, moreover, brought the book fully abreast of the times.

THE PRACTITIONER'S HANDBOOK OF TREATMENT; or, The Principles of Therapeutics. By J. Milner Fothergill, M. D., Physician to the City of London Hospital for Diseases of the Chest, Victoria Park, etc. Third American, from the third English Edition.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

The author has adopted as his motto the saying of FROUDE that "the knowledge which a man can use is the only real knowledge, the only knowledge which has life and growth in it, and converts itself into practical power. The rest hangs like dust about the brain, or dries like rain-drops off the stones." True to the idea herein enunciated the author has endeavored to select from all the divisions of medicine such material as has a practical bearing on the treatment of disease. There is enough of anatomy and pathology in it to meet the requirements in each case, and the practical application of chemistry and physiology is such as to give a rational conception of the disease, or disturbance of physiological action, and the remedies employed to right the disturbance. DR. FOTHERGILL has a very happy style and his use of it in the work before us has resulted in a very readable as well as very instructive book. It is unusually replete with common-sense suggestions, and while not distinctively a treatise on the practice of medicine, it discusses its subjects in a manner calculated to prevent the tendency to routinism into which the student who relies on his text-book in practice is prone to fall. We have spoken very favorably of this book on the appearance of previous editions and are pleased to note that its reception by the profession has created the demand for new editions in such a short time.

A COMPANION TO THE UNITED STATES PHARMACOPŒIA, being a Commentary on the Latest Edition of the Pharmacopœia and containing the Descriptions, Properties, Uses and Doses of all Official and Numerous Unofficial Drugs and Preparations in Current Use in the United States, together with Practical Hints, Working Formulæ, etc. Designed as a Ready Reference Book for Pharmacists and Students. With over 650 Original Illustrations. By OSCAR OLDBERG, Pharm. D., Member of Committee for Revision of Pharmacopœia of the United States, etc.; and OTTO H. WALL, M. D., Ph. G., Professor of Materia Medica, Therapeutics and Pharmacy in the Missouri Medical College, etc. Second Revised Edition.
New York: Wm. Wood & Co.
Detroit: John Macfarlane.

This work, the first edition of which was noticed at length in these columns, differs from the U. S. Pharmacopœia in that it notices many valuable drugs and preparations which the revisers of the latter decided not to classify as "officinal," and which, therefore, find no place therein. The number of such drugs is quite large, and the arbitrary exclusion of many of them will not prevent them from occupying a deservedly high place in the armamentarium of the practitioner. The work is, furthermore, an improvement in the U. S. P., in that it gives the dose of each drug and preparation, giving it in both the metric and apothecaries' weight. The physician will particularly appreciate this feature of it. Some attention is also given to a statement of the medicinal uses of the articles discussed. This division of the work is, however, not very complete. Taken as a whole, the book is much better adapted to the needs of the physician than is the Pharmacopœia, which in its compilation shows a little too conspicuously the ear-marks of the pharmacist.

MEDICAL ELECTRICITY: A Practical Treatise on the Applications of Electricity to Medicine and Surgery. By Roberts Bartholow, A.M., M.D., LL.D. Professor of Materia Medica, General Therapeutics and Hygiene in the Jefferson Medical College of Philadelphia; Fellow of the College of Physicians of Philadelphia, etc. Third Edition, Enlarged and Improved. With one hundred and ten Illustrations.

DR. BARTHOLOW contributes an admirable condensation of what has been written on the subject of electricity as a therapeutic agent, for the use of the general practitioner. Electricity has been redeemed from the hands of the mountebank, and is now a remedial agent of tolerably definite application to diseased conditions. It is no longer a panacea, but, like the various drugs of the materia medica of known properties, its application is quite clearly indicated. No writer has been more instrumental in effecting this exactness of knowledge than DR. BARTHOLOW. The previous editions of his very practical treatise have been extensively read, and, without invidious comparison, we believe there is no work on the subject which so fully meets the demand of the general practitioner. The present edition differs from those which have preceded it in that it amplifies at important parts and has added

to it considerable on the subject of galvano-faradization and electric baths. The work is a very valuable one for the student of electricity, especially in its discussion of the nature of the agent and the instruments for its generation and adaptation to medicinal uses.

A Practical Treatise on Impotence, Sterility and Allied Disorders of the Male Sexual Organs. By Samuel W. Gross, A.M., M.D., LL.D., Professor of the Principles of Surgery and Clinical Surgery in the Jefferson Medical College of Philadelphia; for President of the Pathological Society of Philadelphia, etc. Third Edition. Thoroughly Revised. Sixteen Illustrations.

Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

Dr. Gross' work on disorders of the male sexual organs is too extensively known through previous editions, to require a further notice of that before us than the statement that it has omitted nothing of interest which has been developed in connection with its subject since the last edition appeared.

Therapeutic Brevities.

The Treatment of Acne.—Lassar recommends the following paste for all forms of acne:

B-naphtol, 10 parts.
Precipitated sulphur, 50 parts.
Vasoline or lanolin, 25 parts.
Green soap, 25 parts.

This is to be spread upon the skin to the thickness of the back of a knife-blade, and left on for fifteen or twenty minutess, when it will cause a little burning. It is then to be wiped off with a soft cloth, and the skin powdered with talc. The skin soon becomes inflamed, then turns brown, and finally peels off. The desquamation can be hastened by the application of Lassar's paste with 2 per cent. of salicylic acid. When the desquamation has ceased, the acne will be found to be greatly benefitted. —*Therap. Monatshaft.*, 1887, No. 1.

Pomade for Cutaneous Disorders During Pregnancy.—Monin, in L'Union Medicale, of March 29, 1887, gives the following formula:

Zinc. oxid. pulv., gr. 3.
Hyd. ammon. (white precipitate), gr. 1½.
Ol. theobromæ,
Ol. ricini, ää ʒ 2½.
Ol. rosæ, gtt. 10.

This may be applied to the face morning and night.

Treatment of Sciatica.—Dr. Metcalf, of New York, says that no prescription for sciatica has ever equalled in efficacy the following:

℞ Tinc. aconit. rad., } ää ʒ j.
" colchic sem., }
" belladonna, }

M. Sig: Dose, six drops every six hours.

He also uses triturate tablets, each containing three drops of the following:

Tinc. of aconite root, } equal parts by volume.
" " seeds of colchium, }
" " belladonna, }
" " actea racemosa, }

Dose, one every four or eight hours.—*Journal of American Medical Association.*

Martineau's Remedy for Diabetes.—

Carbonate of lithium, 3 grains.
Arseniate of sodium, $\frac{1}{10}$ grain.
Carbonic-acid water, 2 pints.

Effect the solution under pressure. The effervescing liquid to be drunk at meals, mixed with claret, and the foregoing dose is to last for at least three meals, being taken at the two principal meals of the day customary in Paris. No change of diet is neceesary.

An Ointment for Eczema.—We quote from the Journal of Laryngology for April, 1887, the following formula for Van Harlingen's eczema ointment:

℞ Glycerol. plumbi subacetat , ʒ ss.
Glycerin, ʒ jss.
Ung. aq. rosæ., ℥ j.
Ceræ albæ, q.s.
Ft. ung.

Medical Progress.

The Treatment of Pneumonia in Children.—The occurrence of pneumonia among very young patients is sufficiently common in all temperate and cold countries to make it a matter of importance that clear ideas should be entertained respecting the mode of treatment to be adopted for its cure; and in recent years the introduction of new remedies, many of them presumably adapted to the needs of such cases, has necessarily led to the trial of their virtues in this connection. Recognising the analogous conditions under which the disease is manifested to those in which the fever is a very prominent symptom, the employment of antipyretic drugs has naturally been resorted to by many practitioners as a reliable method of controlling one of the chief accompaniments of the affection, and to this end quinine has, as a matter of course, been

largely employed to combat the pyrexia. It is true that in this country the plan is not to any extent advocated, and that the most trusted and trustworthy text-books on diseases of children do not even mention quinine in such a relation; yet abroad, and particularly in America, it has been tolerably extensively used, and is recommended as of value by those who have experienced its good effects when administered to young subjects. Dr. C. West strongly emphasizes, in his classical work, the utility of bleeding in suitable cases, and the preparations of ipecacuanha likewise find in him and in others of our foremost specialist willing supporters of its efficacy in reducing the fever of pneumonia, and it would be instructive to know in what light these authorities would be disposed to adopt a method of treatment based on the employment of such markedly specific drugs as are included in the class of modern antipyretics. Dr. J. Lewis Smith, of New York, speaking recently before a medical society in that city, is reported, in the New York Medical Record, to have said that the use of quinine was justified on physiological grounds in the pneumonia of children, especially when of the bronchial kind. He complained, however, of the difficulty often encountered in its administration to infants, owing to the sickness likely to be produced, and this notwithstanding careful attempts to disguise the taste of the substance with the aid of syrups, etc. The syrup of wild cherry bark seemed in his opinion best suited to check such vomiting, but as a means of arresting exudation it had to be given in large doses, and for two or three days in succession, until indeed the active period of the disease terminated. The substitution of antipyrin for quinine he very decidedly objected to, but on this point a subsequent speaker, quoting his own experience of the former agent, assigned to it very valuable properties in the pneumonia of children, the dosage employed by him being as much as five grains, repeated in two hours if necessary, for a child five years old. As to the mode of administration, it was mentioned by several observers that rectal suppositories formed by far the best vehicle, the troublesome vomiting and disinclination to swallow the drug usually following its introduction into the mouth being thereby avoided.

Of other means of checking the affection, aconite in drop doses found several supporters, but no one appeared inclined to sanction the treatment by tepid baths as a means of allaying the fever, a plan which among European physicians has attained a certain degree of popularity. The expectant method too was regarded as possessing merits and gave it a full claim to consideration; and speaking generally, measures of depletion did not meet with any degree of favourable notice. The benefits prominently noticeable as following the use of quinine in pneumonia of children, in addition to its influence in arresting exudation and cell migration, were said to be that it produced perceptible slowing of the pulse rate, and increased cardiac disastole. Dr. Putnam Jacobi attributed to this last effect of its employment relief of the lung congestion, through the drawing of blood from the congested organ to the heart and general circulation. The same authority, however, while thus admitting its high value as a stimulant, declined to accept for quinine any distinctive properties as an antipyretic in the disease under question, though admitting that it was a very good drug to be given to children suffering from it.

On the whole the tendency of opinion among American physicians, judged by this discussion, appears to be that quinine as a remedy for pneumonia in children possesses certain useful qualities which entitle it to favorable consideration under certain circumstances, but that the resources of modern therapeutics provide other agents equally productive of good results, and speaking generally, less likely to provoke unpleasant or disturbing effects by their administration.—*Medical Press and Circular.*

Therapeutic Application of Conium.—Conium is one of the few drugs which seem to have retained their reputation from the time of Greeks until the present. It has probably rivalled the majority of drugs in the mutations of professional favor which it has enjoyed. This has been due in great measure to the varying quality of the preparation of the drug used, and this influence, even yet tinctures medical judgment on the subject.

The drug clearly has two actions, a peripheral sensory action and a central motor action.

I have found it to have decided anodyne properties if mixed with wool-fat or lard, and used by inunction in cases of neuralgiæ.

It will be found to relieve both the pain and the vesical irritability of cystitis, and is best applied by the wool-fat ointment (one dram to the ounce), being rubbed in between the symphisis pubis and the anus. It has removed the neuralgic pains which often accompany pregnancy if locally applied in the manner already described. The pains of rectal and utero-vaginal cancer have often been palliated by local applications of the drug.

The fulgurant pains of locomotor ataxia, of chronic alcoholism, and of sciatica, as well as those occurring in chronic rheumatism and chronic phthisis, are often remarkably benefitted by conium.

In acute articular rheumatism it has often both relieved the pain and seemed to exert an alterative action on the disease.

Pruritus ani, if not due to rectal tumors, is often quickly relieved by it, even if fistulæ be present.

It is, however, as a motor sedative that I have found it of most value. Wherever there is motor agitation conium is indicated. In the typhoid-like condition which often results from mental over-work, and is attended with insomnia, exaggerated nervousness and agitated delirium, conium often acts like a charm in securing slumber. It does not do this directly, but acts by removing the motor agitation which prevents the patient from sleeping. The drug should be given in ten-minim doses of fluid extract of the unripe fruit. These may be given, well watched, every half hour till slumber occurs. The preparation should always have the powerful mouse-like odor of conium, else it is worthless.

In epilepsy, in hysteria and in most convulsive disorders, it will be found of decided value, especially since it can be given without fear of producing a habit. It is of decided value in acute mania, and, while it may apparently

cause the disappearance of delusions and seemingly possess an hypnotic action, both these actions are due to its removing the motor excitability, which is at once the source of the delusive ideas and the cause of the patient's insomnia. While conium has no direct hypnotic influence itself, it promotes the hynotic action of other drugs, by removing the motor excitement which interferes with slumber.

In my experience, a combination which answers as an admirable hypnotic in cases where chloral hydrate and hyoscyamus are indicated is as follows:

℞ Ex. fl. conium, } of each, m. vii;
Ex. fl. hyoscyamus, }
Chloral hydrate, gr. x;
Water enough to make half an ounce.

This is to be taken at a dose.

Conium, as might have been anticipated, has been found of value in certain respiratory troubles. In three minim doses, it sometimes acts well in cases in which irritation of the tracheo-bronchial mebrane is the most marked feature, and can often be combined with advantage with expectorants. It has been found to aid the resolvent action of the iodides, and may be advantageously combined with these in the treatment of syphilitic nodes. The drug certainly merits further pharmacological examination, and as certainly some means should be devised of standardizing its preparations. —*Med. Standard.*

A Method of Treating Some Cases of Scanty Menstruation and of Amenorrhœa.—Many years ago, reflecting upon the hemorrhage caused by intra-uterine polypi, I introduced into the uterus, when I wished to bring on menstruation or to increase its amount, small foreign bodies, which were left in its cavity. At the same time other means of treatment were not neglected, such as the use of hot baths, the administration of iron, aloetic aperients, and alteration in the diet and habits of patients, when luxury and indolence appeared to be at the root of the matter, as they sometimes are. The most convenient foreign body is a piece of hempen ligature, doubled several times, knotted, and impregnated with pitch. These were easily passed up to the fundus without any preliminary dilatation, and left there. Some success resulted from their use; but the uterus generally expelled them before they had done their work, and I therefore abandoned them for a Greenhalgh's rubber stem. This is very efficient, and I have, by means of it, been able to do everything needful in a considerable number of cases. The stem, carefully washed in carbolized water, should be introduced and left in position a week before menstruation is due, or supposed to be due. Usually a hemorrhage will result within a few days; but the stem should remain *in situ*, whether it comes on or not.

I could give numerous instances of the success of this mode of treatment, but I have also met with some failures. Still it is the best and most certain means there is of bringing on absent menstruation, or of increasing the flow where it is present but deficient in amount. Any kind of stem may be used. I have found Wynn Williams' very efficient, and it has the great advantage of not being easily expelled from the uterus, which sometimes occurs with Greenhalgh's rubber stem. I have also used Chambers' stem with advantage, but it is liable to "prick," and I prefer the other two. I have also had made what may be called an artificial polypus, to remain entirely *in utero*.

The treatment of amenorrhœa by means of stems is briefly referred to both by Dr. Barnes and by Dr. Edis in their excellent works on Diseases of Women, but the allusion is contained in two or three lines only. There is also a reference to it in a paper by Dr. Routh, in the fifteenth volume of the Transactions of the Obstetrical Society of London, but the case given is one of amenorrhœa from obstruction, and requiring the use of the hysterotome. Treatment of amenorrhœa by dilatation of the cervix has been used in America by Dr. Carstens, of the Detroit Medical Society; and as before the use of Greenhalgh's or Williams's stem it is generally or often necessary to dilate slightly, this dilatation may to some extent assist in producing the result. For several years I thought this mechanical treatment was original, as the well-known galvanic stem acts in a different way altogether, and is considered especially suitable for cases of infantile or undeveloped uterus. I am satisfied, however, that the possibility of treating successfully cases of amenorrhœa and scanty menstruation in the way described is almost unknown to the majority of the profession.—James Braithwaite, M. D., in the *British Medical Journal.*

Food in Fever.—Dr. Mary Putnam Jacobi in a lecture published in *Journal of Reconstructives*, says:

The ideal quantity of nourishment in fever would be that which might entirely cover the waste of tissue caused by the breaking up of fixed albumen. But this ideal quantity can never be given, owing to the multiple disturbance of the digestive organs. The mucosa of the alimentary tract is hyperæmic, or inflamed, or ulcerated, and abnormal fermentations are constantly sustained on its surface. As a consequence, fever patients always suffer from digestive disturbance, of which the mildest is anorexia; but to this may be added nausea, vomiting, and diarrhœa, of all degrees of severity.

Food, therefore, in acute febrile diseases, must be prepared for speedy absorption; it must be liquid; and often it must be artificially digested.

The meat solutions of Liebig and Rosenthal, and preparations of peptones, as that of Rudisch, are the most suitable forms of artificially digested albuminous food. Instead of sugar it is desirable to give glucose. There are no means of digesting fat, and this must be avoided in fevers, from its tendency to decompose into acrid compounds.

The nutritive value of gelatin has been the subject of prolonged and learned controversy. It certainly cannot replace the fixed albumen of tissues, and thus is inferior to peptones, which have been shown to do so. But gelatin is a nitrogenous substance, which is destroyed in the organism with great rapidity, and gives rise to a proportionate amount of urea. It can therefore, to a certain extent, serve to spare albumen. One hundred grammes of dry gelatin

contain 17.3 grammes of nitrogen; 168 grammes of dry gelatin originates as much urea as 84 grammes of dry albumen. In the formation of urea physiological processes are instituted of at least temporary value in nutrition. These considerations justify the use of jellies and also of soups in fever.

Inorganic salts are no unimportant part of necessary food. They are necessary to the assimilation of food by the tissues, and to the elimination of waste products from them. An excess is always eaten and eliminated by the urine. The effect on osmosis is most marked with chloride of sodium, but is noticed with all salts. BOUILLAUD was in the habit of treating typhoid fever patients—having first bled them largely—almost exclusively by table salt. In large doses this substance has some degree of antiseptic action in the intestines. Mucilaginous drinks are always suitable in fevers, although it be unnecessary to ascribe to them the traditional virtues of the French tisane. Alcohol is to be considered rather as a food than a drink. In small doses alcohol is certainly decomposed and oxidized like any carbohydrate substance. Thus, in doses of four ounces and less in the twenty-four hours.

Above this limit, with considerable margin of variation in the individual case, alcohol is eliminated unchanged; and this quantum is a special stimulant of the heart and nerve tissue—is, therefore, a medicine and not a food.

BACTERIA IN ICE AND THEIR RELATIONS TO DISEASE.—In summarizing his study of this subject, DR. T. MITCHELL PRUDDEN, in N. Y. Record, says:

Let us now review briefly the more prominent facts which this study has elicited. We have seen that by the biological analysis of water and ice we are enabled to detect with certainty the presence of bacteria, some species of which can give rise to serious disease, and that chemical analysis alone does not suffice, in cases in which such organisms may be present, but that when we have determined the number of bacteria present in water or ice, a great deal of careful study of other conditions is still necessary in order to determine whether the water or ice is suitable for use or not.

We have seen that the popular impression that water purifies itself in freezing is only partly true. While some gross particles, and to a certain extent materials in solution may be largely removed, the bacteria, which are the most important, if not the sole agents in water deleterious to health, are only in part destroyed by the act of freezing. This partial purification from bacteria is not brought about by their expulsion from the water, but by the death of a varying proportion of them, which cannot survive this reduction of temperature. So that, if the bacterial contamination of the water is extreme, or is largely made up of the more hardy species, the ice formed from it, even though quite transparent, may still contain large numbers of the living germs.

Different species of bacteria possess different degrees of vulnerability to the action of low temperature. In some species nearly all the individuals are killed by prolonged freezing in water, while in other species a small proportion only is destroyed, and between these extremes are other species possessing intermediate degrees of resisting power.

Certain species of bacteria which are capable of producing serious and even fatal diseases in man—the bacillus of typhoid fever and the common bacterium of suppuration—are capable of resisting a prolonged exposure to a low temperature with the destruction of a part only of the individuals thus exposed.

The capacity of resisting a low temperature varies not only in the different species, but among the individuals of the same species, depending upon their condition of vitality when subjected to the deleterious influence. It varies also with the time of exposure to the cold and its intensity, and repeated freezings and thawings suffice to completely exterminate individuals and species which can successfully resist a steadily-maintained low temperature. A persistent low temperature without freezing is more efficacious than when crystallization occurs.

While no absolute percentage of destruction can be given which will indicate the degree to which the water containing bacteria usually purifies itself from them in the act of freezing, experimental data justify the belief that in ordinary natural waters there may be a purification of about ninety per cent.

The effect of freezing may, in a general way, be compared to that of filtration, but there is a very significant difference between them. By filtration the various species, dangerous and harmless, are eliminated with about equal efficiency, while in the purification by freezing the dangerous disease-producing species may be retained if they resist low temperatures, while more or less of the harmless forms may be destroyed. Freezing, therefore, acts as a selective filtration might, and may not free the water from all forms alike.

THE ETIOLOGY AND THERAPEUTICS OF MIGRAINE.—In a contribution to the Wiener Medizinische Presse, PROF. EULENBURG, of Berlin, discusses etiologically and therapeutically this most interesting and distressing malady. Various peripheral irritations, according to him, gastro-intestinal, nasal, or other irritations, are capable of calling forth an attack of migraine, or, at any rate, an attack bearing resemblance to it, especially in neuropathically disposed individuals. The immediate cause of the occurrence of an attack of either the genuine hemicrania, or the pseudo form, lies in considerable and tolerably acute variations in the amount of intra-cranial blood, or in varying fulness and dilatation of the meningeal vessels, and in an asymmetrical condition of them, whereby the nerve endings of the trigeminus in the dura and pia mater are painfully irritated. The brain itself may be affected sympathetically, as shown by symptoms sometimes present of cerebral anæmic irritation. It is not necessary that the vascular nerves themselves should be the starting point of the variation of intra-cranial blood pressure, they are more generally caused by general and local disturbances of various kinds, such as losses of blood, anomalies of cardiac function, etc. Such individuals as are disposed to variations of intra-cranial blood pressure, or varying fulness of the meningeal vessels, and asymmetrical distribution of blood in the two hemispheres, or

excessive irritability of the nerve terminations are particularly disposed to migraine. EULENBURG has shown the probable correctness of his views by determining the galvanic resistance of the head, resistance being not only heightened in migraine and hysterical hemianæsthesia, but asymmetrical in the two halves, the differences being due probably to regional anomalies of blood distribution. As regards treatment the author speaks favorably of massage, particularly in the myopathic form, depending on straining and fatigue of muscles. The process consist in rapid tapping (tapotement) of the affected side and temples, and effleurage, and tapping of the nape of the neck. Antipyrin in gramme doses, repeated in an hour if necessary, is well spoken of, as is also static electricity. We need not recall the use of ammonium chloride, which was much thought of at one time. If this remedy has fallen into disuse it has done so undeservedly, and probably because more was expected of it than was reasonable. It is probably very difficult to cure attacks when once they have commenced, but it is not so difficult to keep them off. This can generally be done for an almost unlimited time by the regular employment of the ammonium chloride in ten-grain doses three times a day along with an equal quantity of some form of bromide. For the attack itself, in addition to the remedies named, a mustard plaster to the nape of the neck, or a linseed poultice with a rather large proportion of mustard in it, will probably be found one of the most effective methods of relief, and one of the most speedy in its action.—*Medical Press and Circular.*

STIGMATA MAIDIS.—Among the new remedies with which the materia medica has of late years been enriched, there are few which have sprung into greater prominence and which manifest evidence of a more tenacious hold on the regard of the medical practitioners, than the stigmata of maize—the silk which embellishes the stalk of our common corn. It may seem somewhat incongruous to call an article with which the people of this country have been so long familiar, a "new" remedy. The adjective, however, as in the case of many other new remedies, so-called, has reference rather to the discovery of some therapeutic property, than to the drug proper. Corn-silk is, therefore, a new remedy, from the fact of the comparatively recent discovery of its properties as an emollient, antiseptic and diuretic. Under its lenitive action the inflamed surface of the genito-urinary tract, and more particularly, perhaps, of the bladder, as in vesical catarrh, is soothed, and the decomposition of urea into the irritant ammonia salts is checked. The flow of the urine is at the same time augmented, and thus we have a combination of the very effects which an intelligent comprehension of a case of vesical irritation, would seem to dictate, on the part of the therapeutist.

The demand for corn-silk has been rapidly growing, since attention was first called to it by DRS. DASSUN and DUFAU, of Paris, and PROF. CASTAN, of Montpelier. The fluid extract must be made from the recent drug, and hence can be prepared only during a few months in the year. The demand, however, for this fluid extract has been in excess of all possible supply during the past year, leading to the substitution, by unscrupulous manufacturers, of a worthless article for the freshly gathered corn-silk, much to the detriment of the reputation of this drug. Messrs. Parke, Davis & Co., who were the first to place a preparation of stigmata maidis before the profession of this country, with the return of the season have laid in a large supply of the drug in anticipation of a continuance of its popularity. Competent employés of this enterprising house have for some time been at work in the cornfields of the west, laying in a stock of the green drug, and suitably preparing it for preservation until it is made up into the form of a fluid extract. In view of the facts above stated, it is important that those who may have occasion to employ corn-silk, may know whence they may obtain a reliable preparation.—*Eastern Med. Journal*, April, 1887.

SALOL IN ARTICULAR RHEUMATISM AND ACUTE FEBRILE DISEASES.—Salol, the new antipyretic remedy, has been tried by DR. HERRLICH (says the Berlin correspondent of the Brit. Med. Jour.) in acute articular rheumatism, endocarditis, typhoid fever, and diphtheria, with good results. Salol, which is a compound of carbolic acid and salicylic acid, may be presumed to have powerful antiseptic and antizymotic properties, and may, therefore, be expected to prove useful in infectious diseases. It is decomposed in the intestines into its two constituent principles, and its action is interesting chiefly in relation to the effects of the carbolic acid thus set free within the system. DR. HERRLICH states that he has cured several cases of acute rheumatism with salol. There were, however, occasional relapses, and the treatment did not prevent the occurrence of endocarditis in some instances. The remedy was tried in eight cases of typhoid fever, and in several cases of diphtheria. Patients suffering from typhoid fever did not bear the remedy so well as those affected with rheumatism. Gastric complications were relatively frequent, and it was found that the best results were obtained in recent cases where the nutrition was still but little impaired. DR. HERRLICH did not find that salol reduced the temperature either too much or too quickly; it did not produce excessive diaphoresis, nor had it any bad systemic effect, with the exception of the gastric disturbance already referred to, and this was observed only in patients in a very weak condition. Carbolic acid poisoning occurred in a woman suffering from chronic articular rheumatism, who had taken 24 grammes of salol in three days. She vomited almost incessantly for eight days, and her urine contained a considerable amount of phenol. She had also much pain and difficulty in passing water. Similar urinary troubles were observed in another case. Salol, however, appears to be beneficial in certain affections of the bladder; urine which contains phenol is aseptic, and remains sweet for a long time.

ACONITINE IN THE TREATMENT OF NERVOUS DISEASES.—At a recent meeting of the Medical Society of the County of New York, DR. E. WAITZFELDER described the physiological action of the amorphous and crystalline

forms of aconitine. The drug, he said, seemed to have a double action on the nerve centers: First, that of irritation; second that of subsequent paralysis. In the treatment of diseases of the nervous system, it was in neuralgias especially that it was of service, and, after citing evidence in this direction from different authorities, he said his own experience with the drug in this class of nervous affections had been equally satisfactory. He had succeeded in curing some patients and relieving others, who had suffered from facial neuralgia for a varying length of time. He had found a combination of aconitine and veratrine, used externally, to act better than aconitine alone. Caution should be observed in applying it near the eye, and over cuts and bruises, as a poisonous amount might enter the system. He had employed aconitine in three cases of chronic sciatica; in two with decided benefit; in the third with no apparent benefit after a month. In the treatment of pachymeningitis, whether syphilitic or not, he had occasionally observed benefit. A marked example was related, in which a woman was relieved of pain within three days, after antisyphilitic treatment alone, long continued, had been ineffectual. There was a history of syphilis. The use of aconitine was almost always followed by some relief in such cases, but not always so soon. He had used it for agonizing headache from tumor in two cases, but without giving relief. In two cases of exophthalmic goitre no effect upon the tumor or the eyes was observable, but the patients said they felt better after the use of the drug. It was of benefit in active congestion of the brain with increased blood-pressure from excessive action of the heart. Here it was combined with bromide of potassium. In insomnia from business troubles it was of benefit in connection with small doses of bromide of potassium. In selected cases, carefully watched, it was useful for hyperæsthesia from spinal irritation, and in cases in which there were doubts as to commencing myelitis.—*N. Y. Medical Journal.*

Concentration or Dilution of Antiseptics in the Local Treatment of Diphtheria.—A. Jacobi, in N. Y. Record: The question as to the concentration or dilution of antiseptics is a very important one. Knowing that bacteria required rather strong antidotes, I, like others, was at one time of the opinion that bacteria and bacteric poisons could not be interfered with, inasmuch as antiseptics able to destroy bacteria would first destroy blood and tissues. This is fortunately a mistake. It is not the degree of concentration which tells, but the duration of administration or application. A permanent irrigation of a three-per-cent. solution of carbolic acid is dangerous; the desired effect can be obtained by a much weaker preparation when used frequently or constantly. In one of his careful and suggestive papers on the effect of carbolic acid on vibrating cells and leucocytes, in the American Journal of the Medical Sciences for January, 1881, Dr. T. Mitchell Prudden proves that a solution of one-sixteenth of one per cent. of carbolic acid prevents the emigration of white blood-corpuscles under circumstances otherwise favorable to inflammation; and another careful investigator, Koch, finds that though bacteria are not easily killed, their growth is stopped by a solution of 1 part of carbolic acid in 850, and their activity by one of 1 part in 1,200. This is all that is required in the large majority of the very worst cases; and these experimental discoveries bear out my clinical experience of the usefulness of great dilutions of carbolic acid. In regard to injections and spray, I again insist upon their frequent repetition, and have also combined with them, for years, another practice, which consists in permanent inhalation of turpentine or carbolic acid, or both. In the room of the patient water is kept boiling constantly, not on gas, if possible, because of the large amount of oxygen which it consumes; not over alcohol, if I can help it, but over the fireplace, provided the steam is prevented from escaping directly into the chimney. Every hour a tablespoonful of turpentine—preferably the crude—and a teaspoonful or more of carbolic acid is poured into the boiling water, and the air of the room filled with the vapor.—*Epitome*, April 1887.

Nutrients in Gastric Intolerance.—In July last there came under my care a lady suffering from parenchymatous rheumatic nephritis. The attack was so acute as to lead to the suspicion of variola, shivering, frequent and terrible lumbar pains, vomiting, but on the third day occurred an œdema, which became general, the urine being examined, removed every doubt as to the diagnosis. In quantity half a litre in twenty-four hours; reaction acid; specific gravity 1035; reddish brown color on account of the presence of blood. Tested for albumen it became a solid brown mass, almost black. The microscope revealed a great quantity of renal epithelium, numerous blood corpuscles, both red and white, etc. The patient was threatened with pulmonary œdema, an obstinate vomiting of mucus and acid rendered impossible the administration of any remedy to overcome the constipation afflicting the patient from the first, and which prevented any possibility, by the intestinal tract, of compensating for the insufficiency of alimentation. Perspiration was induced, cups were applied to the lumbar region, attempts were made to administer milk; first pure, then deprived of butter by beating, and seasoned with salt or with Carlsbad water, but all were abandoned on account of distressing gastric symptoms being aggravated in the most extraordinary manner. Not knowing where to turn for a dietetic and curative method, it occurred to me that when sick infants were afflicted with gastro-enteritis of the gravest nature, I had always used the Carnrick soluble food with the greatest success. I therefore resolved to try it in this instance. I had a teaspoonful boiled a few moments in a glass of water and gave it hot to my patient, who supported it exceedingly well. I repeated the potion after a few hours. In short, nourished with this food alone and treated with a few subcutaneous injections of hydrochlorate of pilo-carpine, the gastric intolerance diminished, the tongue became clean, the breath less offensive, the quantity of albumen contained in the urine being less, and the patient made a good recovery.—Dr. Malacrida, in *Gazette Degli Ospitale.*

Xylol in Variola.—Oetvos, of Budapesth, has selected from 465 cases of small-pox 315 of severity, with whom he used xylol and obtained excellent results. The general anæsthetic effect of xylol was especially noticeable. The contents of the pustules coagulated in three or four days in masses which showed, when incised, a fibrinous base, with proliferation of the Malpighian layer. The pustules were rarely confluent, and only in the most severe and fatal cases. The drying of the pustules was without complications; scars formed very rarely; digestion was but little disturbed. The expired air had an odor of xylol, which produced an agreeable deodorization. An antipyretic or antiseptic effect was not observed. Fever generally ceased on the twelfth day; recovery was accomplished in thirty-two days; death, when it occurred, was on the eighth day.

The remedy was given in wine (added *guttatim*), 6 times daily, for 12 days. Adults took from 30 to 45 minims in 24 hours, the total amount taken reaching 6 drachms. Children took the drug readily in wine; adults used fruit essences and aërated waters. The following is a useful formula:

℞ Xyloli puri, grs. 45.
Aq. menth. pip.,
Aquæ destill., ää ʒ 12½.
Syrup cinnamomi,
Mucil gummi arab., ää ʒ 2½.
M. D. S.
Sig.—Tablespoonful every two hours.

The mortality, including 37 cases of hemorrhagic small-pox, was 22 per cent., which the writer considers a good result, and due to the drug used.—*Therapeutische Monatshefte*, March 1887.

Xylol is obtained from the oily liquid separating from diluted crude wood-spirit, and from the light of oil of wood tar or coal tar. It is a thin, colorless, oily liquid, resembling benzol in odor, has a burning taste, and is insoluble in water, but dissolves readily in alcohol.—*Med. News*, April 9, 1887.

Antipyrin in Sunstroke.—G. A. Harris, M. R. C. S. E. L. R. C. P. has successfully treated a severe case of sunstroke with antipyrin. Apropos of his experience in this case which he reports in a recent number of the British Medical Journal, he remarks:

I was almost constantly with the patient, and have no doubt in my own mind that the two doses of antipyrin of 30 grains each, given at 6.10 P. M. and 7.10 P. M., added to the two doses of 20 grains given subcutaneously some hours previously, had a very decided effect in lowering the temperature, and thereby obviating the tendency to death, and that the subsequent doses of antipyrin above detailed materially aided in subduing and checking the hyper-pyrexial tendency.

If I had a similar case to treat again, I would not hesitate to give 40 grains or even 1 drachm of antipyrin in one dose, guarding it, if necessary, with alcohol and minute doses of atropine to lessen the depression which such a large single dose might produce; and, thus guarded, I would repeat the dose as often as I considered necessary. Although there may be very considerable doubt amongst the profession as to continuously employing powerful antipyretics, as antipyrin, kairin, resorcin, salicylic acid, etc., in reducing the temperature of pneumonia, enteric fever, tuberculosis, etc., seeing that the mere pyrexia in these diseases is of itself rarely fatal, and we are as yet but on the outskirts of the inquiry as to whether the mere reduction of the temperature in these and other pyrexial diseases always cuts short the disease and lessens the tendency to complications, still there can be little, if any, doubt that hyperpyrexia must be cut short speedily to ensure recovery. Whether the means adopted to attain this very necessary end be the application of cold externally (by which I include the giving of enemata also) or the giving of drugs internally, the object is the same, and I think we are bound to leave nothing untried.

Chlorate of Potassium in the Treatment of Cancer.—The Paris correspondent of the British Med. Jour. states that in the Gazette des Hôpitaux of March 1st, M. Reclus describes the results of the treatment of epithelioma by chlorate of potassium. He relates the case of a woman suffering from a tumor, about the size of a walnut, situated on the right cheek. The skin over it was tight, of a violet-brown color, and was cracked in several places. When pressed, the cracks discharged sanguinolent serous matter. There were brownish, squamous spots, slightly cracked here and there, about the size of a lentil, on the forehead and other parts of the face. The patient presented all the symptoms of cutaneous epithelioma of a particular kind, namely, cancroid of the skin, or polyadenoma of the sudoriparous glands. M. Reclus excised the tumor, but a part of the skin remained red, thick, and inflamed. Compresses of a 6 per-cent. solution of chlorate of potassium were applied. Tedeschi, in 1847, first treated an obstinate case of epithelioma of the skin with chlorate of potassium. MM. Leblanc and Bergeron employed this substance in the treatment of epithelioma in horses, in 1857. M. Reclus described several cases of epithelioma in which he had used it successfully. It should not be given internally. M Reclus recommends chlorate of potassium only in cases in which the integument alone is affected; in patients of feeble constitution; in those suffering from any affection of the heart contra indicating the administration of chloroform; and in extensive epithelioma involving the subjacent tissues, where resection or amputation is necessary.

Methylal.—For some time past therapeutists have sought a new hypnotic among acetals. Methylal, which belongs to these, was first classed by M. Malaguti. Methylal is highly volatile. It boils at 42° C. (107.6° F.), and possessess a density of about 0.85. It is soluble in water, alcohol, and oil. M. Personali's experiments proved that methylal rapidly produced sleep in frogs after a dose of 50 per cent. of their own weight; in rabbits, after a dose of 25 per cent. of their weight; in birds, after a dose of 20 per cent.; and in dogs, after a dose of 10 to 16 per cent. A dose of a gramme and a half caused mortality in a pigeon.

Methylal is rapidly eliminated. It modifies

the action of the heart, and increases the number of heart-beats during hypnosis. It lowers arterial pressure and increases the cardiac pulsations. At the same time the temperature is lowered. Methylal lessens the activity of exchange in the tissues while it modifies the circulation and respiration. If methylal be administered to a warm-blooded animal at the onset of accidents caused by strychnine, the tetanic convulsions are checked, and the poison being eliminated the animal may recover. In the case of cold-blooded animals, where the process of elimination occupies a considerable time, the toxic phenomena are suspended while the action of the methylal lasts, and reappear when this action ceases.

Methylal may be administered without difficulty, either by hypodermatic method or introduced into the stomach. M. NICOT proposed to administer it externally, prepared with oil of sweet almonds as a liniment, 85 grammes of the excipient to 15 grammes of methylal; or with alcohol at 80 degrees, in the proportion of 10 grammes of methylal to 110 grammes of alcohol and 5 grammes of lavender essence. A pomade might be made with methylal, containing 33 grammes of fatty substances and 5 grammes of the medicament, and an odontalgic mixture with 8 grammes of alsan and 2 grammes of methylal. A portion might be composed of 1 gramme of methylal mixed with 150 grammes of water and currant syrup. A syrup is made with 1½ grammes of methylal to 100 grammes of golden syrup, and an injection composed of 1 gramme of methylal in 125 grammes of gum water.—*Med. News*, April 16.

INFLUENCE OF DIET ON HEADACHE.—In the *Practitioner*, DR. HAIG narrated a case in which diet had a marked influence in preventing attacks of megrim. The author now considers that the cause of such headache is uric acid. The reasons given for this opinion are founded on: (1) the clinical relationship of megrim and gout; (2) the remarkable way in which this headache is kept in check by a diet poor in nitrogen, or is cured by calomel or salicylic acid, iodide of potassium or even colchium; (3) the signs of gout that are found in the family history of patients who suffer from these headaches. The subjects of these headaches do not suffer from any of the acute symptoms of gout, but rather from what is termed by some "quiet gout." In many cases it has been noticed that these patients suffer from an irritable hyperæsthetic and easily tired eye, a condition recognized by MR. HUTCHINSON, as evidence of a gouty tendency. DR. HAIG now treats megrim by means of small doses of salicylate of sodium, two or three grains being given every quarter hour, for three or four doses, as soon as the headache commences. By this means the headache goes away entirely, and shows no sign return for a considerable period. As to diet, the author recommends abstinence from butcher's meat, cheese, beer, wine, etc. Many patients who leave off meat are free, but directly they recommence eating meat they have a return, and consequently more importance is attached to the regulation of the diet than to the use of drugs for the relief of the headache.—*Journal of Reconstructives.*

GLANDULAR SWELLINGS.—At a recent meeting of the Clinical Society of London MR. FREDERICK TREVES read a paper on a form of glandular swelling which is cured by arsenic. The patients who suffer are usually middle age. The gland tumors appear on both sides of the neck without disturbances in the periphery. The masses vary in size from a hazel-nut to a duck's egg. They are soft, elastic, homogeneous, movable, painless, and free from tenderness. They show a disposition to spread without limit, but suppuration does not take place. MR. TREVES gave instances of the cure of such cases by the use of arsenic. The drug is given in the form of liq. arsenicalis, commencing with a dose of 5 minims and increasing to 20 minims three times a day. The treatment has to be kept up for some months—one to six. The glands waste, some few suppurate, and in such instances the resulting sinuses heal without further treatment. In cases where the whole neck has been filled with great glandular masses the tumors have wholly disappeared after a treatment of from four to six months.

In the discussion on the paper SIR DYCE DUCKWORTH pointed out that chloride of calcium, as recommended by DR. WARBURTON BEGBIE, was a useful remedy. MR. ARTHUR DAVIES corroborated this and said that he had had considerable success with the chloride, which must be employed for a long period and in large and gradually increasing doses. Used in any other way, the drug could not be said to have had a fair chance.—*Chemist and Druggist*, May 28, 1887.

ICE OR HOT WATER IN UTERINE HEMORRHAGE?—In a case of post-partum hemorrhage, which occurred recently at the Philadelphia Hospital, the resident physician, after vainly using vinegar and then introducing a lump of ice into the uterus, stopped the flow by intrauterine injections of hot water. The patient got on well until the third day, when septicæmia was manifested; the disease happily yielding to intrauterine injections of corrosive sublimate, as indeed most cases of this disorder in the puerperium do when these injections are properly used. But the question naturally arises as to the origin of this isolated and single case of the disease. Concerning the very remarkable results obtained by PRUDDEN, stated in a recent number of the Medical News, as to the enormous number of living bacteria found in the ice supplied to many of the citizens of New York, often from twenty to fifty thousand in a cubic centimetre, and with the probability that some of the Philadelphia ice is no better, it does not seem impossible that the disease was conveyed to the patient by the ice which was put into the uterus.

The choice between ice and hot water for the arrest of post-partum hemorrhage ought not to be doubtful, for most assuredly the latter is more certain in its action, and does not produce the depression that follows the application of cold. But if it is possible that septic infection may be conveyed by the introduction of ice into the uterus, we have a stronger argument against its employment.—*Med. News.*

THE TONIC ACTION OF CASCARA SAGRADA.—It seems to be pretty well established that

the therapeutic action of cascara sagrada is towards the grandular system, particularly the secretory. It acts satisfactorily in stimulating the secretions of the liver, bowels and the entire alimentary canal. It influences the ganglionic system, and through this stimulates all the organs depending; it is claimed to especially influence the portal circulation, and, as a result, to act in an unexpectedly happy manner in the suppression of hemorrhoids. (In giving it for the latter affections, it has been found best to give the fluid extract in small doses, sufficiently so as to cause the effect to fall below catharsis). It increases peristaltic action by its tonic and stimulating action upon muscular fibre, producing contractibility and tonicity. Its virtues in cases of obstinate and prolonged constipation are beyond doubt. For promptness and thoroughness, as well as ease of action, no remedy seems to take its place. The following formula has been used with success in such cases:

℞ Fld. ext. cascara, 2 parts.
Fld. ext. berberis aquifolium, 1 part.
Ext. malt, 2 parts.
Simple syrup, 1 part.
Dist. water, 1 part.

Dose.—One dessertspoonful to be given every four hours, until the bowels move, and then one teaspoonful three times a day.—*Pacific Record.*

Benzoin in Treatment of Ulcers.—In a recent number of the *Russkaia Meditzina*, Dr. Voskresensky, surgeon to the Fëodosiïky Regiment, highly speaks of benzoin as a specific for treating ulcers, especially those which occur in emaciated, cachectic, and old persons. The remedy has been largely used for the purpose by Russian peasants from time immemorial, after a crude fashion. The author employs it in the shape of a salve, prepared *extempore* of two drachms of resina benzões, half an ounce of yellow wax, and half an ounce of lard. The ointment is spread in a moderately thick layer over a piece of linen, and placed on the ulcer. The latter must be previously irrigated with tepid water, and then dried with hygroscopic cotton-wool. The dressing is to be changed as a rule twice daily, but in cases of very large or old ulcers it is advisable to change it three times a day. A marked improvement becomes visible within a few days; torpidity of the ulcer, callosity of its edges, and its liability to bleed rapidly disappear: granulations assume a more rosy tint, and begin to discharge a thick benign pus; while there appears a whitish-bluish zone of the corium, which gradually spreads from the periphery towards the centre of the ulcer. This favorable action of benzoin on ulcers is ascribed by the author partly to its disinfectant and antifermentative, partly to irritant, properties.

Sodium Salicylate and Arsenic in Diabetes.—Dr. J. C. Wilson, of Philadelphia, has found two remedies of unquestionable value in the treatment of saccharine diabetes. One is sodium salicylate and the other is arsenic. Both have received the sanction of the ablest clinicians. He has recently obtained, in several instances, advantageous results, such as neither remedy alone has yielded, from their combined or simultaneous employment. In one case at present under observation, the administration of gr. xv sodii salicylas with gtt. v. liquor potassii arsenitis four times daily, the diet and general management unchanged, has been followed, in the course of four weeks, by a reduction in the amount of urine from 148 to 56 fluidounces in twenty-four hours, and in the specific gravity of the total quantity voided from 1.034 to 1.020, with a corresponding decrease in the amount of sugar. He finds that the arsenite of bromide possesses no advantages over other preparations of the metal, but that full doses are required. So soon as the physiological effects are manifested, the drug is discontinued for a time. He regards the opium and codeine treatment as inadequate, of only temporary advantage, and inadmissible, in the present state of knowledge, except in the last stages of intractable cases.—*College and Clinic Record.*

Benzoate of Soda in Internal Catarrh.—M. Ruault communicates the following note to the Société Clinique de Paris on benzoate of soda in internal catarrh. He has administered this drug for catarrh in increasing doses. The results encouraged him to make a communication on the subject, although he has not studied the physiological action of the drug nor its mode of elimination. Benzoate of soda acts only in doses of four to six grammes. He has given such doses to a great number of patients affected with common colds that began with coryza and were followed by tracheobronchitis. The remedy was administered at the 'period of coction.' Expectoration was produced in one or two days, and the secretion dried up two or three days later. By administering the drug at the beginning of the affection, a cure was generally effected in seven or eight days. In a case of catarrh of the larynx, there was marked improvement after only three days' treatment. The author thinks that erythematous sore throat with concomitant tonsillitis may be advantageously treated with doses of six to eight grammes daily. The drug was found serviceable in the chronic forms of such affections, but is inferior to terpine in chronic catarrh of the larynx.—*London Med. Record.*

Neuralgia—A Novel and Simple Remedy.—The treatment consists in the application of a closely fitting copper wire to the skin about the neck (worn constantly) in those suffering from the trouble in the face or head, and about the waist in those effected in various parts of the body. It is possible that this remedy may also prove curative of sciatica. I would suggest a trial.

As to how the remedy acts I cannot say, and like many other valuable things we use, that point may never be fully and satisfactorily explained. The fact that it is a source of relief is the most important point to a practical physician, and we may well leave it to those who delight in beautiful theories (so frequently shattered) to study on this point. We know that cases of this kind have been cured by animal magnetism. We know that Dujardin-Beaumetz, of Paris, has experimented successfully

with the application of metals in the treatment of certain nervous diseases, and has transferred disease from one person to another by means of a magnet. We hear of certain ear troubles being relieved by the same means. Just how the magnet acts to produce such results is perhaps a partial mystery, even to the successful operator —W. E. SCOTT, M. D., in *Progress.*

UNNA ON SWEET SUMACH IN ENURESIS.—The fluid extract of the root-bark of the sweet sumach, Rhus aromatica, an Anacardiacea indigenous to the U. S. of North America, has lately been successfully employed in nocturnal enuresis of children. It acts as an excitant on the non-striped muscles of the bladder, the uterus, and the inferior portion of the digestive canal, and beneficial effects have likewise been obtained from it in hæmorrhage of the bladder, the uterus, and the rectum, as well as in atonic diarrhœa. DR. UNNA recommends, from three years experience, this extract in enuresis of children, for which it acts as a specific. He prescribes to infants and children, up to two years of age, five minim doses in the morning and at bed-time; to children from two to six years of age, ten minims twice daily; and to older children fifteen minims twice daily. He never observed any injurious concomitant effects, even after its uninterrupted use during several months. Its tonic effects, however, are not permanent, the paresis of the sphincter muscles of the bladder returning soon after discontinuing the remedy. It ought, therefore, to be given daily as a rapidly acting palliative until the weakness has been gradually overcome by other adequate measures (training to the habit of regularly emptying the bladder, cold baths, douches, cool beddings, etc.), and only then to be gradually withdrawn.—*London Medical Record*, April 15, 1887.

A NEW TREATMENT OF DIABETES.—A Paris correspondent of the N. Y. *Med. Journal* writes: There has been considerable talk of late about a new way of treating diabetes, proposed by DR. MARTINEAU, one of the physicians to the Lourcine of which DUJARDIN-BEAUMETZ has said: "If the future confirms its success, it is a marvelous event in therapeutics." M. MARTINEAU says that he has used it for the last twelve years, curing sixty-seven out of seventy patients. The method, which was suggested to him by M. ROUGET, is simply this: Put into the upper part of an artifical seltzer-water apparatus (such as Briett's), of about a quart in capacity, filled with water: 1. About three grains of carbonate of lithine. 2. A teaspoonful of a solution of three grains of arsenite of sodium in a pint of distilled water. This lithinated arsenical water is to be drunk, mixed with wine, with the meals, and the quart should last for three meals. No other special treatment is to be followed, expect that fruits, sugar, etc., are, as usual, not to be taken in any quantity. It is well known that certain natural arsenical waters, such as those of Bourboule and Royat, have a favorable action in diabetes, and it is certain that M. MARTINEAU is one of our trustworthy physicians, so that the treatment may be tried.

THE TREATMENT OF MORPHINOMANIA.—We have recently received two publications on the treatment of this important and increasingly prevalent complaint The first, by DR. OSCAR JENNINGS, of Paris, is "Sur un Nouveau Mode du Traitement de la Morphinomania," and is illustrated by nearly thirty sphygmographic tracings, The other and smaller work, covering much the same ground, is entitled "Considerations sur la Traitement de la Morphinomania," and has been prepared by DR. JENNINGS in conjunction with PROF. BENJAMIN BALL, the well-known alienist. The drugs chiefly relied on for cure of these patients are nitro-glycerin and sulphate of sparteine. The former is given in tabloids or as a 1-per-cent. alcoholic solution, whilst the latter is administered hypodermically, usually in doses of from two to four centigrammes. Sparteine has hitherto been but little used in medicine, but its action on the cardiac inhibitory ganglia is so marked that its seems not improbable that it has a brilliant future before it. The effects on the pulse are admirably illustrated by the sphygmographic tracings, and the success attending the new method of treatment is especially gratifying.—*Lancet*, May 7, 1887.

ELECTRICITY AS A GALACTAGOGUE. — M. PIERRON has made use of electricity to produce a flow of milk, and thinks that its application in the manner he describes will cause a secretion of the fluid even in virgins. He states that in 1884 he successfully treated a woman, in whom the usual remedies had failed to increase the secretion of milk, by means of faradic electricity. Since then he has treated a number of similar cases in the same way, and always with complete success. The following are the details of the procedure: The positive electrode, shaped like a spherical cup, is placed over the nipple, while the negative electrode, ending in a ball, is applied under the breast. In this manner the orifice of the gland is the first to be excited. Afterwards the positive electrode is moved over the entire surface of the gland, while at the same the negative electrode is displaced in such a way that the former may converge toward the latter. The current should not be strong enough to cause pain. Each application should last ten minutes, and should be renewed every twenty-four hours until milk is obtained, which rarely fails to happen after the fourth application—*Weekly Med. Review.*

THE TREATMENT OF CHLOROSIS WITH SULPHUR.—According to SCHULZ and STRUBING (Deutsche med. Wochensch., No. 2, 1887, 24) three forms of chlorosis may be distinguished therapeutically: 1st, that which disappears on the simple treatment of an imperfect digestion; 2d, that for which the use of iron is necessary; 3d, that which is unaffected or made worse by treatment with iron. For this form the authors have employed sulphur, on the ground that it is one of the constituents of the tissue. They report a series of such cases treated in this way, and give the following generalizations of the results obtained:

1. In the cases of pure chlorosis in which iron was without effect, the general condition was greatly improved by the use of sulphur.

2. After sulphur had been given for a considerable time, the treatment with iron could be commenced and carried out with good results.

3. In those cases of chlorosis which were complicated by catarrhal or inflammatory conditions of the digestive tract, sulphur was not well borne.

NEW TREATMENT OF THE MORPHIA HABIT.—In L'Encephale, No. 2, 1887, JENNINGS gives his experience with a new plan of treatment of morphiomania. The amount of the narcotic is gradually reduced, and in the period of inquietude and distress various forms of dynamic stimulation are employed, such as faradization, massage, dry friction, mechanical vibration by Granville's percuteur; sounds, as music; and heat, by warm bath. By these means the insupportable craving is allayed, and the dose can be progressively diminished. The only medicines employed are bicarbonate of sodium, preparations of valerian and nitro-glycerin, which produce a glow and pleasant sensation, not unlike that of morphia. The essential features of this method have been employed with success by WEIR MITCHELL, who has found seclusion, careful nursing, massage and electricity most valuable adjuncts in the treatment of this distressing and obstinate condition.—*Med. News.*

COCAINE IN THE INCOERCIBLE VOMITINGS OF PREGNANCY.—Cocaine has lately come into use for the incoercible vomitings of pregnancy, and in several cases reported by WEISS, ENGELMANN, HOLTZ, and BOIS, it seems to have given good results. WEISS prescribes a teaspoonful every half hour of a solution containing fifteen centigrammes of hydrochlorate of cocaine in one hundred and fifty grammes of water. ENGELMANN and HOLTZ use a three per cent. solution in ten to thirty drop doses, while BOIZ applies to the neck of the uterus, night and morning, a pomatum in which one centigramme of cocaine is incorporated with fifty grammes of vaseline. FRAIPONT prefers the hypodermic method, injecting under the skin a Pravaz syringe full of a four per cent. solution, and claims signal success in other forms of obstinate vomiting, as well as in the vomitings of pregnancy.—*Boston Medical and Surg. Journal.*

HYDROBROMATE OF QUININE.—Hydrobromate of quinine is the subject of a long article in the *St. Petersb. Med. Wochenschr.*, by DR. MAXIMO NOVITCH, who has for some time past been engaged in studying the relative merits of the different salts of quinine.

He considers the di-hydrobromate the most useful salt. Its advantages are greater solubility, no tendency to produce irritation of the skin when used hypodermically, its causing less cerebral annoyance, hence, JACOUD employs it exclusively in typhus. STEINTZ and PROFESSOR ROSENTHAL recommend it for whooping cough, hysteria, nervous vomiting and the pains of ataxy.—*Gazette Hebdomadaire de Montpellier.*

AMMONIUM PICRONITRICUM.—The following is a formula for the administration of this substance, which has been used in the treatment of malaria:

℞.—Ammonii picronitrici, gr. 4½ to gr. 24.
Pulv. rad. glycyrrhizæ, gr. 24.
Syrupi glycyrrhizæ, ℥ 24.
M. div. in pil. 30 in num.

It should be observed that the salts of picric acid, when mixed with dry substances, form explosive compounds, and a liquid should always be used in their combinations.—*Therapeutische Monatshefte*, March, 1887.—*Medical News*, April 23, 1887.

THE TREATMENT OF COLD ABSCESS.—DR. ANDRASSY (Brun's Beiträge zur klinische Chirurgie, Bd, ii. S. 311) advises the treatment of cold abscess by means of injections of iodoform. He injects the following mixture into the abscess cavity: Iodoform 10 parts, glycerin 50 parts, water 50 parts. He makes two or three injections, as a rule, at intervals of about fourteen days, and obtains a cure by this means in from four to five weeks.

He has treated 22 cases of cold abscess by this injection, and in 20 a speedy and a perfect cure followed. In no instance were any of the phenomena of iodoform poisoning produced. The method appears to be well adapted for large abscesses.

ON LAVAGE OF THE STOMACH IN PERITONITIS.—Encouraged by SENATOR'S employment of this method in peritonitis with excessive meteorism, LEWIN has used it in two instances with excellent results (Berliner klin. Wochensch., 1886, No. 44, p. 763). Both were cases of acute peritonitis following operation for strangulated hernia. Lavage was performed three times daily, and followed by the administration of opium. Immediate relief was obtained, pain and eructation were lessened, and sleep procured. Opium had been previously employed without effect. The washing removed the continually accumulating grass-green masses, and diminished the meteorism.—*Amer. Journal of Med. Sciences.*

ANTI-STRUMOUS RESOLVENT LOTION.—DESCROIZITTES is quoted by the Journal Laryngology for April, 1887, as prescribing the following:

℞.—Chloride of sodium, ʒ 10.
Sulphate of magnesia, ʒ 3-4.
Tincture of iodine, ʒ 1-4.
Distilled water, ʒ 37 1-2.

Compresses soaked in this solution are applied to strumous enlargements, — *Medical News.*

LOBELINE. — PROF. BARTHOLOW predicts that when lobeline is made in quantity, which after-demand will no doubt necessitate, it will be one of the most used remedies for all respiratory neuroses, generally speaking.—*Col. and Clinical Record*, April 15, 1887.

The Medical Age.

Vol. V. DETROIT, JUNE 25, 1887. No. 12.

Original Articles.

CELL ANTAGONISM.*

BY ELISHA H. GREGORY, M. D., ST. LOUIS, MO.

Obviously, force and matter "make up" the universe. Force implies antagonism, antagonism perpetuates motion. The living cell is the embodiment of nature. Cell antagonism is life. Multicellular organisms represent a community of vital unities. A model organism in equilibrium is health. Cell struggle is the gist of modern pathology. Every organ and every element are vulnerable. The strength of resistance in elements and organs, reinforced by the harmony and precision of coördination, and the vigor of counter-agencies, are the momentous questions.

In seeking for a comprehensive title for my address, I fell upon the two simple words "cell antagonism," which form the foundation of symptomatology and pathology, conjoined with cell changes, the basis of pathological anatomy, embracing at once the universe of life and all the possibilities of life; disease being but one of the multitudinous phases of life.

HUXLEY has likened the body to an army. "Of this army, each cell is a soldier; an organ, a brigade; the central nervous system, headquarters and field telegraph; the alimentary and circulatory system, the commissariat. Losses are made good by recruits born in the camp, and the life of the individual is a campaign, conducted successfully for a number of years, but with certain defeat in the long run." A model organism assumes that every soldier is a stalwart; every organ, a body of stalwarts with corresponding machinery of coördination and precision, all alike concerted and vigorous to meet the myriads of counter forces, many of which are too cunning for our ken, but ever ready to take advantage of the least failure of our strength, to penetrate our vitals. This force of vital resistance forms the basis of therapeutics, this *vis medicatrix naturæ* will be always the indispensable auxiliary of the physician, without which ally abandonment of the art would be inevitable.

The morphologist distinguishes two classes of elements within the organism. One class represents the fixed cells, cells which occupy the fortifications within the inter-cellular substance; the other class provides for the formation of new tissue, and represents the standing army, sometimes called embryonal substance. Before COHNHEIM, our knowledge of the mobile elements—the mobilized army—of the body, was nothing; now most of the literature relating to neoplasm is or has become obsolete. Now coagulable lymph is impossible without the white corpuscles. Organizable fluids have vanished. Through the ingenuity and industry of the great German pathologist a revolution has been worked in medical thought. The study of the mobile elements of the body—the relatively independent elements — promises much. We can almost see daybreak in pathology, a dawn before the coming light which is to illuminate some of the dark places of this most intricate subject. Already leucocytes substitute fibrin. The latter is the product of the former. Wherever there is localized impairment of nutrition referable to irritation, or defective maintenance of nutrition, the result of inherent weakness, there the leucocytes concentrate, feast on the devitalized structures, and thereby develop into a tissue replacing that which they have consumed. When the surgeon wishes to dispose of an adventitious structure, a cyst, for example, in the connective tissue, he lowers the vitality by over-stimulation—irritation; when he confidently expects the leucocytes to congregate and destroy the cyst, substituting a granulation tissue, which in time becomes scar tissue. Now an organizable fluid as the essential product of inflammation, cells playing a passive part, is a thing of the past. Now cell potency, cell subtlety, and cell antagonism constitute the pith and marrow of medical science. There was a period in the history of pathology when all the neoplasm sprang from the tissue cells; now the place and destiny of the cell tissue is fixed. When the tissue elements yet contain some undifferentiated protoplasm, proliferation is possible, otherwise not probable. The mobile cells constitute the mobilized army; the great coördinating centres assemble them at any moment, ready to antagonize hurtful agencies. Irritation always provokes a concentration of the white cell. Irritation means injury. It may be simple or specific. Either way it is a signal for moving the army in solid phalanx to confront noxious agencies, and the

* President's Address delivered before the Thirty-Eighth Annual Meeting of the American Medical Association, June 7th, 1887.

combat is hotly contested till victory or discomfiture.

Inflammation, the keystone of medical science, the standard process by which all other pathological conditions are measured, is only to be explained on the theory of cell antagonism; it is practically a struggle between irritant bodies and white blood-corpuscles. Foreign bodies are invariably invaded by leucocytes, their swarming having for its object to repel or render inert the offending cause. Observations directed to the white cell have been followed by an inspiring increase in our knowledge of the vital properties of cells in general. The quality of spontaneous motion once accepted, the idea that the cell played a passive part quickly disappeared, and in its stead came the conception of autonomy, the fact that the cell nourished itself, is not nourished, that the cell specialized food for its own purposes, actually breaking up compounds and adapting the products to its own growth and development; strikingly illustrated by an independent form of government, for example, the government of the United States. A great statesman has said ours was a "government of the people, by the people and for the people." Cells live of themselves, by themselves and for the whole body. The cells make the central government. The coördinating machinery is formed by the cells, and the cells are in their turn centralized and harmonized by this power. The tissue elements are in direct continuity with the centre, but it is otherwise with the floating, wandering cells; yet their behavior gives evidence of their concern for the well-being of the entire organism. Again, the free cells take into their substance the most refractory substances, digesting solid bodies; sponges and green plants yielding to their digestive and assimilative processes. Observations the most patient and trustworthy on the lower vegetables have demonstrated the fact that bacteria have been seen in the substance of amœboid cells; others have been seen pursuing bacteria, ultimately capturing and destroying them. Throughout the whole animal kingdom mesoderm cells use their ingestive power for destroying micro-organisms. Further, this property seems to be utilized for the removal of larval organs. Colorless corpuscles present the same appearances and have similar properties and the same mode of origin in the entire range of living beings. When the irritant or harmful agency is particularly obdurate, white cells exhibit a very strange habit of throwing out processes which unite with similar processes from neighboring cells, until a considerable mass of protoplasm is formed by their confluence, constituting a giant cell. Thus an army of giants may be improvised on occasions of extreme emergency; for example, when the tail and gills of the tadpole are to be swept off, this powerful division is ready for the Herculean task.

Apply these facts to the inflammatory process in mammals. Suppose a foreign body lodged, that moment leucocytes leave the blood-vessels and congregate for the purpose of opposing the intruder. In such diseases as tubercle, leprosy, etc., the giant cells appear, and in their centre—their substance—the specific bacillus is found. KOCH found the bacillus anthracis and the bacillus of septicæmia in the mouse, enclosed by white blood cells. We say, with these observations before us, inflammation exhibits a new aspect; cells conquering cells as a process of normal physiology; simply the free cells, the white cells resisting injury, there being a provision not only for concentration, but for increasing their number and augmenting their strength, corresponding to the emergency. A recent authority, MR. SUTTON, says: "If we summarize the story of inflammation as we read it zoologically, it should be likened to a battle. The leucocytes are the defending army; their roads and lines of communication, the blood-vessels. Every opposite organism maintains a certain proportion of leucocytes as representing its standing army. When the body is invaded by bacilli, bacteria, micrococci, chemical or other irritants, information of the aggression is telegraphed by means of the vaso-motor nerves, and the leucocytes rush to the attack, reinforcements and recruits are quickly found to increase the standing army, sometimes twenty, thirty or forty times the normal standard. In the conflict cells die and often are eaten by their companions; frequently the slaughter is so great the tissues become burdened by the dead bodies of the soldiers in the form of pus, the activity of the cells being testified by the fact, that the protoplasm often contains bacilli, etc., in various stages of destruction. The dead cells, like the corpses of soldiers that fall in battle, later become hurtful to the organism they in their lifetime were anxious to protect from harm, for they are fertile sources of septicæmia and pyæmia, the pestilence and scourge so much dreaded by operative surgeons. The analogy may seem to some a little romantic, but it appears to be warranted by the facts."

Just here the question obtrudes, are the action which follows mechanical, chemical and thermal injuries, and the action caused by vital injuries alike inflammatory processes? In the one, that resulting from physical causes, the nutrient processes are not disturbed, simply increased. In the other, that resulting from vital causes, the cell processes are disturbed, thwarted and vitiated. It seems unfortunate that the action which succeeds to traumatism should be confounded with that which succeeds to specific germs. The nutrient changes come into vigorous play after an ordinary in-

jury, altered in one particular only, viz: the presence of a palpable neoplasm, which substitutes the structures doomed by the injury. The addition of new material is invisible in ordinary nutrition, growth and maintenance for example, the substitution being atomic. When a structure is destroyed bodily, as in traumatism, the substitution is corpuscular, therefore palpable. It is certainly perplexing to assume, as does SIR JAMES PAGET, that a visible neoplasm is produced by inflammation, but its development is impossible till after the withdrawal of the inflammation. To get rid of confusion, though we do not emerge from error, is to make a step towards truth. The full effect of traumatism is immediate and complete; it cannot increase itself, therefore its effects are always limited and within the possibility of estimation, for the reason that cause and effect are in precise correspondence; besides, antiseptics do not influence the changes in any particular. On the other hand, the most extensive and severe injuries of vascular parts, involving bone, joints, the great cavities, etc., are possible without producing inflammation, provided antiseptic precautions be taken. When such complication ensues, it is a wound accident, not a wound incident, and the result of infection. There is no disturbing factor in the process incident to repair; no waste products. If pus is found, it is the result of the intrusion of some noxious agency, some contagion, some pestilence; in short, a specific cause.

If it be agreed to call the action inseparable from ordinary injury, physiological repair, the term inflammation is limited to the series of events referable to a vital agency, which until very recently has eluded detection. A specific agency determines a class of diseases as distinctive and definite as the living creatures studied in natural history. Cell antagonism after physical injury is simply a substitution, through the development of mobile cells, of the tissue which has been spoiled. The fixed elements multiply and develop the expansion and perfection of the several structures of which they are components, but take no active part in the process of repair after injury. After the perfection of the body, the factors favoring proliferation and those which inhabit it must be in a state of balance. In functional hypertrophy, the balance is towards the side of proliferation. On the other hand, in non-functional hypertrophy, the problem is not so simple; the balance is disturbed towards proliferation by some mysterious agency. How strikingly different when the cell antagonism is with a vital injury; here cell mysteries clash. The bacteria enter into conflict with the mobile and fixed cells, but it is not possible to know how the conflict is carried on. Certainly a series of disturbances ensue in the normal metabolism of the elements. The functional, formative and nutritive activities which are the expressions of cell life, must be altered; their vigor, perhaps, lessened; and their susceptibilities modified. Exceptionally their life is enfeebled or extinguished. The issue of a bacterial affection is either the death of the patient, or the destruction and elimination of the bacteria. It follows that this disturbance of cellular activities, is always at the bottom of morbid symptomatology; and observations have shown that disease of this kind, successfully withstood, leaves the elements in a peculiar insusceptible condition, insuring an immunity, almost or or quite complete, against a fresh invasion of the same or kindred bacteria. This modified susceptibility was practically understood by JENNER. PASTEUR, resuming and systematizing the great Englishman's work, successfully modified cell forces, rendering them harmless by cultivation, and sending them on the important mission of destroying the natural proneness to the deadly assaults of the uncultured cells. Whilst we may despair of ever understanding the essential nature of vitality, the study of the causes which regulate life, and their subordination to conditions which may be determined, has led the way to the grandest achievements of recent times. PASTEUR and LISTER are the great apostles of practical thought.

HUXLEY has suggested that it may be possible to introduce into the economy a molecular mechanism which, like a cunningly contrived torpedo, shall find its way to some particular group of cells and cause an explosion among them, leaving the rest untouched. PASTEUR'S cell mechanisms exceed the conception of the great scientist, for they cunningly change the vital qualities of the elements without destroying them. May we not look forward for some great advance in therapeutics in the direction to which PASTEUR'S genius points, by the study of cell antagonism. Certainly vital subtleties may best cope with vital subtleties. Study of the conditions in which infective agents arise, by ascertaining the circumstances which limit or facilitate their diffusion, has already raised surgery to a proud preëminence. With therapeutics it is otherwise, as it is doubtful whether the new facts have yielded the slightest increase of power against the diseases of mankind. Let us not despair. Knowledge must come first, then wisdom brings its practical application. The study of cell possibilities, their readiness and energy in rendering inert noxious agencies, whether introduced from without or arising from within, exhibiting an antagonism at once potent and direct, rather tends to dampen one's therapeutic enthusiasm. The thoughtful student sees nothing abnormal in disease. To be sure there is a physiological emergency, but there is no disorder in the cell processes; rather

the perfection of order. If a physical or chemical cause intensifies the cell changes, in other words, determines the physiological emergency, every cell movement is direct, purposive and efficient, ending only when the intruder is ejected, encysted or accommodated. On the other hand, if the offense be a vital one, a living cell, a microphyte, the spectacle is that of one living creature preying upon another, a declaration of the first law of nature, not an enemy, but an intruder struggling for self preservation—simply a physiological fight for life. Can we hope for an ideal tonic for cell antagonism, such as would innervate the cells on one side and enervate them on the other? The "old chestnut" "prevention is better than cure" is not yet worm-eaten.

Cell antagonism implies a struggle. The duration of the struggle is determined by the quality of the irritant and the strength and resources of the antagonists. Acute inflammation is a sharp and decisive action; chronic inflammation is slow and indefinite. There are two strikingly important chronic conditions, viz: the interstitial inflammation and the infective granulomata interesting alike to the physician and the surgeon; both are alike disastrous, the one, interstitial inflammation, destroying by cicatrical contraction; the other, infective granulomata, by stopping at the fibro-blast stage, retrogression replacing development. The quality of infection and the failure to develop beyond the stage of granulative tissue is the exact condition as illustrated by tuberculosis, syphilis, lupus, etc., in contrast with which is fibrosis of the liver, cirrhosis, fibrosis of the kidney, Bright's disease, fibrosis of the brain, sclerosis, interstitial inflammation, destroying the tissue elements by strangulation, and infective granulomata by contamination.

Again the two varieties of inflammation referred to declare that the quality of the irritant determines the effect of the inflammation, the interstitial variety being caused by physical agency, and the infective by a vital one. Cells antagonize physical causes without losing any of their vital qualities. Not so when cells antagonize vital causes. When cells are pitted against cells they may be despoiled of their highest quality, as in the infection granulomata, they have parted with formative activity. In short, the knowledge that pertains to the presence of a vital irritant, epitomizes all that has been taught of infective disorders. The symptomatology and pathology of this class of diseases is but the life history, the play of cell activities, metabolisms and catalysis of antagonizing organisms, as likewise the knowledge pertaining to the presence of a foreign body or physical irritant, is the knowledge in brief of fibrinoses in general of that entire class of disorders known as interstitial inflammations. A persistent irritant—injury—with its attendant concentration of leucocytes, their inevitable development and ultimate transformation, the history of the capsulation of a foreign body, whether it be animate or inanimate, is the history of cirrhosis of the liver, fibrosis of the lung, morbus Brightii, atrophy of the heart, atrophy of voluntary muscles in general, sclerosis of the brain and bones; in short, diffuse capsulation. Some disseminated irritant, say alcohol, determines a sclerosis of the liver, and how? Every particle of alcohol being a foreign particle, having its capsule, it follows that capsulation is as uniformly distributed as the cause. An artisan inhales fine particles of steel or other foreign material and fibrinosis of the lung is the consequence. The irritants of gout and rheumatism are lodged in the kidney, the interstitial tissue of the organ increases, and in the end strangulates the tubules and malpighian bodies, resulting in shrinking and total disorganization of the organ, constituting Bright's disease. Like changes occur in the heart; coincident with the development of the interstitial fibrous tissue is atrophy of the muscular substance, substituting a fibrous induration for its normal structure. A similar change in the voluntary muscles occurs in the curious disease known as pseudo-hypertrophic paralysis, chiefly afflicting children. The connective tissue between the muscular fibres increases so much, that the muscles affected may exceed their normal size three times. Later, however, the new tissue shrinks, and the contractile material of the muscles is spoiled. The condition of sclerosis of the bones corresponds to cirrhosis of the liver, and Bright's disease of the kidney. In the nerve centres the interstitial tissue—neuroglia—takes on the same chronic over-growth, strangling the nerve strands and cells, giving rise to the most singular and complicated nervous phenomena. The changes thus induced are recognized by the general term sclerosis. If it involves the fascicules of BURDACK and the column of GOLL, locomotor ataxia results: if the medulla, bulbar paralysis, etc.

We have purposely avoided reference to diathesis, as also to the precise neurological relationship of cells, not because we deny their influence, but because too little is definitely known. On the contrary, the behavior of cells relatively to irritants, is well understood. The presence of a foreign body is at once and directly resisted by the leucocytes; a zone of inflammation, its destruction, transportation or capsulation, even parasites which resist the death-dealing assaults of the leucocytes, are at last imprisoned in cases of fibrous tissue.

There yet remains for our consideration a mysterious possibility relating to cell life, of great practical moment, viz; that of entering upon a life of independence, separating from the central nervous system "headquarters" disregarding the "field telegraph," oblivious

o the morning "drum beat," and wholly ignor-
ng the restraining and directing influence of
nvironing structures. We have learned that
owever much irritation may affect the vital
ualities of cells, their fidelity is always pre-
erved, there being no sign of disaffection, the
rmy ever intact, the fealty of the soldiers su-
reme. Physical causes—traumatism—may
rush or impair the tissues, but the cells come
o the rescue with all vigor and directness.
The prolonged presence of bacteria may impair
he forces of the cells, enfeeble and extinguish
hem, but as long as life lasts their efforts are
n harmony with the purposes of the organism.
Thus it appears that alienation is not possible
hrough the agency of irritation, however in-
ensified, modified or prolonged.

The question constantly obtrudes: is aliena-
ion possible to a mature element, to an
lement that has assimilated itself physiologi-
ally as well as anatomically, with the sur-
ounding tissues; taking part in its functions
oncurring and co-operating in all the process-
s of the economy? This question seems to
ave confronted COHNHEIM, when his ingenu-
y suggested the embryonal elements hypoth-
sis, viz: that the tumor germ was congenital;
hat there were in the mature body embyronal
lements and tissues not utilized in the elabor-
tion of the normal structures—latent, embry-
nal rudiments; small embryonal cells so dim-
nutive as to elude observation, inactive per-
aps, till some exciting cause awakens activity.
s not an embryonic element in a mature
rganism an alien? Is it not already an in-
ependent element? Are not patches in the
kin, pigmented moles, islands of cartilage in
nature bone, congenital angioma, etc., inde-
endent structures, already tumor germs, con-
enital rudiments of tumors? Accept the hy-
othesis of the great German pathologist, and
ne problem of tumor etiology is almost solved;
remains only to find the exciting cause; the
redisposition is inherited; irritation, simple
r otherwise, may be nearly allied to the
wakening impulse. The difficulty is to recon-
le cell antagonism with the proposition. this
octrine includes: the idea that all discordant
odies are treated as intruders, either ingested,
ansported, or covered up. We can conceive
ne possibility of the existence of an inoffensive
ssue or element, one that simply draws its
ourishment from adjacent tissue, without any
rious disturbance of their normal metabolism.
We would gladly adopt the theory of COHN-
ELM, which ascribes the origin of tumor neo-
lasms to persistent germinal rudiment. Cer-
inly it has much to recommend it.
ountless latent embryonal structures, re-
tively independent, are tolerated by
ne organism, remaining inactive till
vored by some concurrent event, the nature
which is incomprehensible, when they may
grow according to their bent. Is it not quite as possible there may be similar, relatively independent elements, ready when stimulated to multiply independently? Congenital angiomata often grow without definite limit; pigmented moles, black, slightly raised patches in the skin, with which all are familiar, are composed of tissue exactly resembling sarcoma; always suspicious because of their disposition to proliferate independently. It is most difficult to believe in the infidelity of covenant cells, of sundering the compact which unifies the organism. Emancipation seems almost out of the question. We must not only believe that dependent benignant elements become independent, but indifferent, vicious, infective. In short, the elements of the host, become the elements of a parasite—a parasite so vigorous, corrupt and wicked as to destroy its source.

The painful part of the retrospect of a year is that which recalls those who have been taken from us. The past year has had a very special grief for our association in the death of one of our ex-Presidents, DR. WILLIAM OWEN BALDWIN, who died at his residence, and the place of his birth, Montgomery, Alabama, May 30, 1886. He was among the early members of the American Medical Association, and its President in 1869, presiding at New Orleans. His address on that occasion will be remembered as abounding in Christian and patriotic sentiments, eminently befitting the good and great physician. The Committee charged with the organization of the Ninth International Medical Congress, which meets at Washington City this year, had named him as one of its Vice-Presidents. DR. BALDWIN was remarkable for his culture, the eloquence of his speech and the beauty of his diction, and will be remembered as an imposing figure in the history of this great Association.

I need scarcely remind you, gentlemen, that we shall have with us, after a few weeks, the medical men of all nations. Soon we shall extend the hand of friendship to those with whom we have heretofore been united in interest and sympathy in the cause of science. We know that everything is being made ready and that success is assured. Again, you will join me, I know, in the declaration, that a hearty American welcome awaits their advent, and that the Ninth Meeting of the Great Congress will be memorable in the history of its organization.

SANITATION IN FLORIDA.*

BY C. Y. PORTER, M. D., KEY WEST, FLORIDA.

As I rise to greet you I see before me representatives of our noble profession, from the

* President's address, delivered before the Florida State Medical Society.

various sections of the State, assembled together to-day in the common cause of philanthropy and humanity. To each and all of you it gives me pleasure to bid a cordial welcome, trusting that this 13th meeting of the Association may be one of the most interesting and profitable in its history.

In the exercise of my duties as presiding officer during the past year, I have been called upon to make no decisions, and therefore conclude with much satisfaction and pride that the utmost harmony prevails in the different county and local societies of the State. It is with devout thankfulness that I announce that our State has been spared during the past year any epidemic, and that we have not the history of any serious sickness to speak of or discuss. But while with hearts full of gratitude to the Giver of all good for having spared us as a community, yet we each as individuals have been called upon to mourn the loss of some who are near and dear to us by family ties or friendship. The Silent Messenger has invaded our circle since we last met, and with his light but certain touch has singled out one of our number while in active work, to perform that journey from which none return. Dr. J. C. Donnelly, Second Vice-President of this Association, departed from the scene of his early labors March 12, 1887. There are those who knew him more intimately than myself, and to them I leave the sad privilege of paying a just tribute to his life; but the memory of his brilliant intellect, his sparkling wit and humor, his fidelity to true medicine and his generous hospitality, will long be remembered by the fraternity of the State, and especially by those whose good fortune it was to meet him in annual conclave.

To the memory of those of our medical brethren, not members of our Association, and unknown even by name to many of us, yet who have fallen at their post of duty, clad, like the gallant knights of old, in full armour of actual practice, I would pay due homage and respect. They were physicians—a name most dear to us and one that carries with it thoughts—suggestions of much toil and small recompense—and of having faithfully labored in the vineyard of science and truth; having toiled in season and out of season, in rain and in sunshine, and who having combatted the grim monster, have finally yielded to his summons. Let us hope that, sustained by that power whose mysterious work they have studied in the human frame, they have gone to their rest "like one who wraps the drapery of his couch about him and lies down to pleasant dreams;" that having safely crossed the dark river they now rest 'neath the shade of the trees on the other side.

And I sit and think, when the sunset's gold
Is flushing river, and hill and shore,
I shall one day stand by the water cold,
And list for the sound of the boatman's oar;
I shall watch for a gleam of the flapping sail,
I shall hear the boat as it gains the strand,
I shall pass from sight with the boatman pale
To the better shore of the spirit land.
I shall know the loved who have gone before
And joyfully sweet will the meeting be,
When o'er the river, the peaceful river,
The Angel of Death shall carry me.

Although this is the first time the Association has met in St. Augustine, there seems to me a peculiar appropriateness in our gathering here. For it was at this place, we are told, and at this season of the year, that the gallant Ponce de Leon, three centuries ago, first landed in his romantic search for the fountain of health in the Land of Flowers. It is therefore fitting that we who are endeavoring to discover and point out the way of health should discuss on this historic spot the most rational means of bringing about that ideal state of public well-being which all men desire. And I cannot help feeling that a peculiar responsibility rests upon the physicians of Florida. While there are now no Ponce de Leons eagerly looking for the impossible, our State is nevertheless the Mecca of many thousands who hope to find in its balmy atmosphere a complete restoration to the health they have lost, or at least a respite from their suffering.

Florida is unquestionably the hope, and so far as one State well can be, the future home of many of the invalids of this great country. It is easy to see that with the usual character of this immigration, coupled with the fact that the comparative recent development or "opening up" of the State has given us a strikingly heterogeneous population, the physicians have before them a task of unusual magnitude and difficulty to adequately instruct, direct, and care for the people. The obligations imposed upon us as conservators of the public health are too well understood and appreciated by all of us, I am sure, to require emphasis at my hands. And yet there are some truths, no matter how trite, whose consideration can hardly be too frequent or earnest; so I trust I may be excused if the few thoughts I present are already familiar to you all.

One of the most important subjects for us to bear in mind, it seems to me, is our duty in the matter of teaching and insisting upon correct and sufficient public sanitation. The public, especially of Florida—on account, largely, of the peculiar newness and dissimilarity of our population already hinted at—are wofully ignorant in regard to this matter, and, I trust I am not speaking too strongly—indifferent to it as well. It devolves upon us, therefore, to correct erroneous impressions concerning the sanitation of cities and towns, and to insist

upon prompt and unvarying obedience to such regulations as may be enacted for the public health. I am aware—for I speak from experience—that this involves laborious work that will oftentimes prove distasteful and make enemies; but our duty is none the less clear or urgent because frequently disagreeable. The lot of the member of the average board of health is pretty certain to be, like the policeman's in "The Pirates," an unhappy one at times—as doubtless most of you have discovered, but we must school ourselves to accept the unpleasant consequences of misconception and perversity, and to push on to the goal of popular enlightenment and co-operation. It is a thousand pities that our local boards of health, meeting with the opposition that they do, should be so limited and fettered in their powers. It is earnestly to be hoped for and desired that the present Legislature of the State, now in session, may form a State Board of Health with powers so broad and comprehensive that nothing may be omitted which the most captious and critical of sanitists could wish for, for it is my opinion that to this organization, now about to be created, much of Florida's advance, commercially and otherwise, is to be due. All the unhappy experience of the past shows conclusively that boards of health should be given almost absolutely authority in their fields, for the lack of it exposes them continually to an ineffective carrying out of their plans and directions, and sometimes to personal insult and bitterness of feeling. The importance of giving our boards of health more scope and power was vigorously pointed out at the last annual meeting by the then president, Dr. Phillips, and I heartily agree with him in what he said about the need of more thorough organization for the purpose of commanding a proper attention to our claims from the State Legislature.

It is not my purpose to discuss in detail methods of public sanitation, but merely to call attention to its importance. There can be no more important subject to the people than the cleanliness of cities and towns and the investigation of disease, and the seeming indifference of Legislatures to our reasonable requests is therefore all the more vexing and strange. Before us lies the task of teaching the masses that filth and the neglect of hygienic precautions means the breeding of disease, the enfeeblement of health, the shortening of life and the impoverishment of the masses by destruction of business through epidemics; that the sanitary policing of our cities and towns is an imperative necessity which can be neglected only at the inevitable cost of suffering and death. The difficulties of this task are heightened by the indifference of the people to the conditions of health and the certainty that the ignorant will put all sorts of obstacles in our way: but we must be patient and unrelaxing in our efforts, trusting and believing in better things for the future. The end we aim at is to be secured largely through personal work and agitation, and much can be accomplished by seeing that human physiology, scientific sanitation and hygiene are systematically, even if in a primary way, taught in our public schools, and this instruction to be more thoroughly continued in our high schools and colleges. Large and discouraging as our task may appear, it can be accomplished sooner than we expect if only our physicians are earnest and unremitting in their efforts.

It is not alone to domestic hygiene and sanitation that the future prosperity of our state depends. Possessing, as it does, an immense sea coast, with fine harbors and many navigable inlets, it is the more important that a system of quarantine should be perfected and enforced that will, during the summer, or when sickness prevails as an epidemic elsewhere about the globe, protect our sea coast cities from the introduction of pestilence. While I believe in stronger measures, I believe also in intelligent ones, and I would abolish the term quarantine, which savors of centuries of superstition and darkness, and substitute therefor "maritime sanitation," as suggested by an able surgeon of New Orleans. I have faith in a system that will hamper commerce and travel as lightly as is consistent with true protection. I would insist upon this protection, and I would make it so certain that it would be as infallible in its method of procedure and ultimate action as anything human can be; but with stringency I would have intelligence and ability. Such a system, I claim, our State has been the first to inaugurate, by which uninterrupted communication can be had with a foreign port, the native habitat of one of the most pestilential diseases, and at the same time have that disease effectually excluded from our coast. What was an experiment looked upon with distrust two years ago, now has the unbounded confidence of our sea coast cities. The only danger to the system is one of relaxing vigilance, and as eternal vigilance is said to be the price of liberty we can appropriately paraphrase the saying in this instance as being the eternal price of health and happiness.

To those of you who will soon be called upon to exercise authority in the State Health Association, I would especially invite attention to the imperative necessity of immediately securing an enactment that shall effectively suppress the charlatanism which is peculiarly a curse to Florida on account of the ignorance and superstition of its negro, and a considerable portion of its white population. The audacity and the impudence of some of the itinerant quacks who infest the State, especially during the winter, are simply amazing. It is not alone the harm

they do by wheedling the last dollar from the pockets of poor people, giving them worthless nostrums in return, that warrants legal interference, but their unconscionable denunciation of the regular physicians and their methods, thus offsetting and making invalid much of our best work among the masses. We need a law for the suppression of charlatanism more for the protection of the masses than of the physicians, for the people are the chief sufferers. And this desirable law, while sufficiently exacting and severe to suppress the dangerous quacks referred to, need not exclude from practice those men of education and professional attainments who, through some whim, choose to array themselves among the "pathies," as it has unjustly done in other States. We need not surrender any of our traditions or beliefs of purposes while bearing a liberal attitude toward honest men whose views, as physicians, may differ in minor details from ours. To practice medicine in this State or elsewhere, the person should be a gentleman or lady in the strictest sense of the term, and should possess a thorough knowledge of the fundamental of medicine, together with a liberal education otherwise. With these requirements fulfilled and substantiated by a board, I would permit him or her to practice medicine irrespective of the terms they choose to apply to themselves. More is to be gained, it seems to me, by cordial co-operation with intelligent, educated and sincere "dissenters," if I may borrow the term, than by the continuance of the antagonism which has so long characterized the relations of the schools, so called, of medicine. Let us take pains to make it understood that we hold these liberal views, accepting what is good and true no matter where we find it, and the good feeling and co-operation which will follow will more than compensate for what may appear an unbending from our hitherto "close communion" position. Our association should be broad and liberal enough to be above differences and dissensions that a little frank and good natured discussion may reconcile or dissipate. It frequently happens that men who suppose themselves hopelessly opposed to each other with regard to certain principles or views, find, upon comparing notes, that in reality they can work harmoniously together for the attainment of a common end.

Our work as public sanitists ought to be easier in the future than it has been in the past, for there is now a general recognition of the fact that many diseases are preventable—whereas there was a time when all diseases were considered a direct visitation of Providence—that there is a growing feeling among the people that scientists are able, through chemistry and the microscope, to discover impurities in food and water, and that therefore men who make a specialty of scientific sanitation and investigation ought to be able to discover and avert causes of disease. I repeat, that there is a growing appreciation of these things, and the fact ought to encourage as well as help us. If we but do our part untiringly and heartily, we shall soon gather the beneficient fruit of our labor.

OXALURIA.

BY J. E. HOFFMAN, M. D., POUGHKEEPSIE, N. Y.

During November, 1886, a young man, Mr. M., æt. 36, called at my office and gave me the following history: He complained of experiencing more or less pain on passing water; said that there always was a greater or less amount of "semen" and other sediment in the bottom of the vessel; also stated that he had been suffering from a complete loss of sexual power and excitability for a number of years, but had been ashamed to consult a physician. He also complained of considerable pain in the lower half of the spinal cord; had been troubled for several years with a short hacking cough and general weakness. From his history I learned that his father died of pulmonary trouble, and also that he, as a boy, had been addicted to self-abuse. I placed him on tonics and some of the aphrodisiacs, and after continuing for some three months, I was forced to give up, not having had the least particle of benefit from that treatment.

I then again made a very careful examination of the spine and of the urine, when, after some difficulty, I accidentally discovered oxalic acid crystals, and found the water so heavily charged with the same that there was no doubt in my mind as to the patient's suffering from "oxaluria."

I should like to take the liberty of calling the attention of the profession to the extreme difficulty of detecting these crystals, unless one has had a previous experience, or, as in my case, has met them by accident. In placing the urine to be tested under the objective, the operator will set his instrument with great care until he meets an object, when he will devote himself to the slide in order to examine the entire surface. And it is here where the mistake is so easily made. By carefully operating the set screw it will be found that there are two or three layers of deposit, and in oxaluria the crystals are invariably found at the bottom. Again, as these crystals are extremely transparent, the greatest care is required not to pass them by.

I have since then met with several cases, which shows how frequent this disease really is. As this peculiar condition is the cause and result of many more or less definitely marked phenomena and disturbances of the nervous system, I should suggest that physicians be very careful in giving an opinion regarding a patient's condition in all doubtful cases, without

having made a microscopical analysis of the the urine; otherwise they will be apt to fall into the same error as did a celebrated neurologist of New York, in the case cited by Dr. J. S. Bauer, of St. Louis (Med. and Surg. Reporter), who pronounced the case one of serious nerve trouble. The patient returning to St. Louis and placing himself under an acidulated carbonic acid treatment, soon recovered his health.

My treatment in the case I have mentioned has been: Electricity for the spinal difficulty and the external organs of generation, three applications a week, of twenty to thirty minutes duration. Internally:

℞ Acid muriatici dil.,
Acid nitrici dil.,
Syr. aurantii cort., each ʒ ss.
Aq. destil., ʒ ij.

M. Sig.—One-half teaspoonful three times a day in a wineglassful of water.

I also prescribe the following injection to be used night and morning, when the patient has a strong desire to urinate:

℞ Acidi nitrici pur., ʒ ss.
Aq. destil., ʒ ij.

M. Sig.—Fifteen gtt. in a tablespoonful of water, to be injected. Urine voided about five minutes after to avoid irritation of the bladder.

Correspondence.

FLORIDA STATE MEDICAL SOCIETY.

May 31st, 1887.

At St. Augustine, at 12 noon, Tuesday, May 17th, the thirteenth annual session of the State Medical Association was called to order by Dr. F. F. Smith, Chairman of the Committee of Arrangements. He introduced Rev. Edward L. Down, who offered a very impressive prayer, after which Dr. Anderson, Mayor of St. Augustine, welcomed the Association to the city in a few well-chosen remarks. Dr. C. Y. Porter, of Key West, President of the Association, thanked him for the welcome in behalf of the Association. Dr. W. F Shene, in behalf of the St. Johns County Medical Society, offered a most hearty welcome.

These preliminaries over, President Porter stepped to the front and delivered a most able and pleasing address (see page 269), reviewing the medical progress of the State for the past year, and suggesting work necessary to be done in the future, especially from a sanitary point of view. His address lasted about thirty minutes, and was listened to with marked attention. It was referred to the Committee on Publication.

At the close of this address the meeting adjourned until 3 P. M.

At 3 o'clock the Association came together again, with Dr. Porter in the chair. Its members were largely swelled by arrivals on the afternoon trains. The President read a letter from Dr. J. C. Pelot, who is member of the Legislature, which is now in session, transmitting a copy of a bill he recently offered that body, providing for the creation of a State Board and County Boards of Health, and requesting suggestions upon all points. It was taken up section by section, and discussed fully, but it had been so carefully considered that many changes were not found necessary to make it a bill that the Association could heartily approve. Its discussion occupied the whole afternoon, and when completed, it was ordered returned to Dr. Pelot with a request that he use all means at his command to secure its passage.

Dr. C. J. Kenworthy read a paper, "Was it Basilar Meningitis?" in which he gave the history of forty-one cases of an epidemic of a disease which broke out in the convict camp while working upon the Wycross Ry., in 1881, and which, by exclusion, he diagnosed to be basilar meningitis when he had lost the first five, after which he did not lose any. His treatment consisted in giving pulv. doveri and quinia sulph.

The evening session was called to order at 8 o'clock. Dr. J. T. Green, of Leesburgh, had prepared a paper on "Malarial Hæmaturia," but as he was unable to attend, it was read by Dr. N. G. Thomas. This paper embodied the results of a long and active practice in the malarial regions of Mississippi, Louisiana and Florida, and was teeming with important facts in the history and treatment of this disease. He believes that relapses have often been brought on after the urine has become clear, by large doses of quinine, and now his main reliance is antipyrine.

"Antipyrine" was the subject of the paper read by Dr. R. A. Lancaster, of Gainesville. He has used it in a great number and variety of feverish states and is well pleased with its effects. This provoked considerable discussion, in which antifebrine was compared with antipyrine and extolled as being less liable to produce nausea, and as capable of producing the same antipyretic effect with much smaller doses. Dr. Caldwell, of Sanford, reported that at the South Florida Railway Hospital at Sanford, they had experimented with the two, side by side, with quinine, in a part of the twenty-one hundred cases of fever at that institution during the last year, and his preference was for antifebrine.

The President appointed a Committee on

Nominations, after which the Association adjourned until 10 a. m. on Wednesday.

After adjournment the Association was tendered a reception by the Mayor, DR. ANDERSON, where was spent an hour in most agreeable conversation. The refreshments served were most excellent.

After roll-call Wednesday morning, DR. LANCASTER, President of the Alachua County Society, reported the expulsion of one of the members of his Society for criminal abortion; but as he was not a member of the State Association it was decided that this Association could take no action unless the matter came before it as an appeal from the County Society's decision.

DR. J. D. FERNANDEZ, of Jacksonville, read the history of several cases of retention of urine, showing the instruments he used in overcoming the stricture.

DR. J. K. RAINEY, of St. Augustine, presented a child about four months old in which, at birth, the right arm was flexed at the wrist, at a right angle to the radial line, and bound so firmly against the face, just above and anterior to the right ear, by several turns of the cord, that is had made a depression at that point which was still perceptible. It was a very tedious labor, and delivery was finally affected by the use of forceps. By passive movements and massage he has been able to restore the arm to nearly a normal shape, but has not much hope of making a useful member of it.

A letter was read from DR. R. J. DUGLINSON, of the American Medical Association, asking for aid for the International Congress. It was referred to a special committee, upon whose recommendation a hundred dollars was voted for the purpose named, and the County Societies were urged to vote the sum of ten dollars each for the same object.

The Treasurer, DR. FERNANDEZ, of Jacksonville, made his report which showed a balance on hand at present of $633.00.

DR. F. F. SMITH read an instructive paper upon the "Climate of St. Augustine in Summer."

DR. DEWITT WEBB followed with a dissertation, entitled "The Indian Under Medical Observation," being a statement of his experience with the Apaches while they were confined at Fort Marion, St. Augustine, he being surgeon in charge of them.

The Orator, DR. NEIL MITCHELL, President of the Duval County Board of Health, presented a scientific explanation of the "Mind Cure," which was highly appreciated by the audience present.

The Committee on Nominations made their report, which was adopted, and the following officers were elected for the ensuing year: J. W. Hicks, Orlando, president; D. Stewart Lyon, Winnimesset, first vice-president; W. J. Jolly, second vice-president; J. D. Fernandez, Jacksonville, treasurer; A. W. Knight, Jacksonville, secretary; H. Caldwell, Sanford, librarian; F. F. Smith, St. Augustine, orator.

Gainesville was selected for the place of meeting in 1888.

There were fifteen new members elected, which indicates that the profession of the state are becoming alive to the idea that "in union there is strength." Among these new members was DR. A. E. TYNGE, from the Duval County Society, the only woman who has asked for admission.

By a unanimous vote the treasurer was instructed to pay DR. A. W. KNIGHT an *honorarium* of one hundred dollars for his efficient services as secretary for so many years.

After adjournment DR. DEWITT WEBB and his most estimable lady gave the members of the Association and their ladies a reception at the San Salvador Hotel, and thus ended in a very pleasant manner one of the most pleasant and instructive meetings of the Association for many years.

Those who stayed in town the following day visited the State Deaf, Dumb and Blind Institution upon invitation of DR. ALEXANDER, who is physician in charge.

H. S. ALLYN, M. D.

ORANGE CITY, FLORIDA.

ELECTRICITY IN TREATMENT OF CERVICAL CATARRH.

In THE AGE of May 25th, vol. 5, No. 10, you copy an article from the Medical News entitled "Electricity in the Treatment of Cervical Catarrh," in which this treatment is extolled by JOURET. Now, why call attention to European authors when this same treatment was the theme of DR. GEORGE J. ENGELMANN'S paper, published in vol. xi, Gynecological Transactions, 1886? There you will find a description given by DR. ENGELMANN of his use of and splendid results from electricity in uterine disorders Over one year ago I had the pleasure of witnessing the application of this treatment in DR. ENGELMANN'S Clinic, in St. Louis, and was then assured that the use of electricity for uterine troubles was not new to him. I will say that in over two months' service in his clinic I never saw as fine results and as much relief afforded by any treatment for any purpose as I saw there in that time. Now, to say the least, it raises my Americanism to see this same treatment lauded to the skies because it comes from Europe. Let us credit up Americans when we can, and when we cannot, then praise Europeans.

JOSEPH HAIGH, M. D.

GRENADA, KANSAS.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JUNE 25, 1887.

Editorial.

BALDNESS—WHAT CAN WE DO FOR IT?

A good head of hair, besides being a very pretty thing to be possessed of, is so popularly supposed to be indicative of bodily vigor and physical strength, that when the hair-brush begins to be suspiciously charged with other capillary than that which grew on the backs of swine, your æsthetic individual and he who prides himself on nature's gift to him, take alarm. The family physician is, perhaps, first consulted, but the suspicious thinness on the hirsute of his cranium provokes the ancient taunt, "physician heal thyself," and confidence in his ability in this direction is correspondingly unsettled. It may be, however, that this reason for lack of confidence does not obtain, and a course of treatment is entered upon under the most favorable adjuvant of faith on the part of the alarmed patient. Usually, however, the capillary continues to be shed, and "scientific" treatment is exchanged for the nostrum, "restoratives," and "tonics," which are warranted, in the newspapers, to make even the desert spots blossom forth in more than their whilom luxuriance. But in the great majority of instances love's labor is lost, and the depilation goes on until the places which once knew the luxury of a hairy covering become of all places the most barren. It is one of the kind provisions of nature that the sensitive victim of this devastation succeeds in convincing himself, often for many years, that the applications which he makes to his head are doing it good, and consequently, the "hair restorative" industry is one of the most profitable in the country. Large fortunes have been made through thus preying on this weakness of human nature.

To convince one of the impotence of the medical profession to grapple with this subject of baldness, he needed but to view from the rear the late meeting of the American Medical Association, at Chicago. We have viewed from the same vantage ground gatherings of many of the callings of men, but for absence of obstacle to the entrance into the Pineal gland of the benign influences which are supposed to descend from above, this particular meeting bore the palm. Doubtless, this is the reason why medical men excel, as they do, all other men in all those qualities of head which are communicated rather than evolved. But, seriously, it has been argued with considerable plausibility that intellectuality bears a close causative relation to baldness. A writer in the Popular Science Monthly found by actual count that baldness was far more prevalent among educated than uneducated people. In churches and operas, for instance, he found from forty to fifty per cent. of the audience bald, while in low places of amusement, as cheap museums and prize-fights, the percentage was only from twelve to twenty-five. In active intellectual effort the circulation of the head is increased, and the scalp sympathizes and becomes warmer than usual. This increased warmth of the scalp may operate in the same way as the wearing of tight unventilated hats, which sweat the hair more or less, and cause also compression of the arteries. Be the cause what it may, baldness is evidently on the increase and if the profession would stop its spread they must give more attention to the subject than it has hitherto received.

Apropos of this subject we find in the Medical Record of the 7th ult., an article by Dr. George T. Jackson, of the New York Skin and Cancer Hospital, which, we believe, portrays very fully the known limits of medicine in this direction. The writer recognizes four varieties of baldness: 1, alopecia adnata; 2, alopecia senilis; 3, alopecia prematura or presenilis; and 4, alopecia areata. Alopecia adnata, as its name indicates, is a congenital affection. It is very rare and is due to an arrest of development. Fortunately, under proper hygienic conditions, nature usually comes to the relief.

Alopecia senilis is the form which sets in usually at about the age of forty-five, and is accompanied or preceded by loss of pigment. It is the kind which most prevails and when it once sets in, commencing either on the vertex or anteriorly, it is only a question of time when the scalp assumes the smooth, shiny, stretched appearance with which the most minute description would fail to make the reader more familiar. The cause of this form of baldness is a gradual sclerosis of the subcutaneous tissues of the scalp, the retrograde process beginning in the arterial supply to the scalp, a fibrous endarteritis narrowing the lumen of the cutaneous arteries, till finally the capillary circulation about the hair-follicles is obliterated. It is but one expression of that general lowering of nutrition incident to advancing years. Doubt-

less, it may exist without appreciable diminution of vitality in other parts. Instances are numerous in which men's vigor has not abated one tittle with this growing baldness, but it is the beginning of a process of degeneration which will, ere many years, extend to other tissues. There is no cure for it, and the best advice for those in whom it sets in, at or about the age indicated, is to cultivate that philosophy which relieves the mind of all those distractions which it is the effect of the vanities of the world to foster. Would that some of our dearly-beloved contemporaries could be brought to view the affection as it has attacked them in this light. There would be less cumbering of their columns with "formulæ for baldness."

Alopecia prematura or presenilis, is that form of baldness which sets in before the age of forty-five. This dividing line is purely arbitrary, but is adopted from the fact that forty-five is generally conceded as the age when man reaches his prime—the top of the hill of life. Alopecia prematura is recognized as of two varieties, idiopathic and the symptomatic. The idiopathic variety is chiefly hereditary in its nature. Improper or deficient care of the scalp and hair is another prevalent cause. The treatment is mainly one of prophylaxis and of hygiene. This is much more satisfactory in its results than any of the host of applications. The prophylaxis should be commenced in early life in those whom heredity predisposes to baldness, and Dr. Jackson lays down some excellent instructions under this head in his paper. An occasional shampoo (once in two or three weeks) with soap and water, or, borax and water, should be practiced through life, and the hair thoroughly dried after each application. Combing and brushing of the hair should be done systematically and not less than five or ten minutes should be spent in this task daily. The brush should be of moderately stiff bristles set in groups widely separated from each other. Such a brush will open up the hair to the air, dislodge the secretions on the scalp and set up that glow of the surface which should follow each brushing. When the hair commences to fall, local stimulants may be employed and Dr. Jackson has found hypodermic injections of pilocarpine useful, although they are productive of most good in alopecia areata. The curative treatment of alopecia prematura is, however, at best unsatisfactory.

Symtomatic premature alopecia is of four varieties: Alopecia furfuracea, or pityroides; alopecia syhilitica; alopecia follicularis; and defluvium follicularis. The most common of these is alopecia furfuracea. The names of the other varieties suggest the remedies indicated in their treatment, and we quote Dr. Jackson at length on the subject of the treatment of the first variety:

"If it were better understood that dandruff is often followed by baldness, it would be early submitted to treatment, and there would be fewer bald heads. The prophylaxis for this form of baldness is the same as for the idiopathic form, and need not be repeated here.

The curative treatment of alopecia furfuracea is first addressed to the ridding of the scalp of the seborrhœa or pityriasis. If there are thick crusts or cakes of sebaceous matter on the scalp they must first be soaked with oil and and then removed by the shampoo. If dandruff is present in only slight amount the shampoo may be used at once. For this purpose we may choose the tincture of green soap. If the scalp is too tender for that we may use Sarg's liquid glycerine soap, Pear's glycerine soap, Castile soap, or any good toilet-soap. Or, if the scalp does not tolerate these, we may order a shampoo of eggs, made by beating up the yolks of three eggs in a pint of lime-water and adding half an ounce of spirits Cologne, if we want perfume. Borax and water make another excellent wash. Do not stint the water. Rub the shampoo vigorously into the scalp in all directions, using either the fingers or a long-bristled, moderately stiff brush. When the scalp has been well rubbed, the soap or chosen shampoo is to be washed out with a copious stream of water of a temperature agreeable to the patient, or, if convenient, with alternate douches of hot and cold water. The scalp and hair are then to be thoroughly dried, and a little oil rubbed into the scalp. If an excess of oil has been used it may be readily removed by pulling the hair between the folds of a towel moistened with Cologne, alcohol, or ether. The shampoo should be repeated daily for a week or so, and then once every week or two.

While the care of the scalp and hair is, perhaps, the most essential element of success in the treatment of those cases, still they need stimulating treatment in addition. So many stimulants have been recommended that one is somewhat embarassed by the extent of riches. We may use carbolic acid in alcohol, two per-cent strength; tincture of capsicum or of canthárides, one to three drachms to the ounce of water; chloral hydrate or tincture of nux vomica, one drachm to the ounce; the stronger water of ammonia, pure, or diluted if too strong; these may be used either as lotions or ointments, separately or in combination. Then there is a wash of rum and quinine which every druggist keeps upon his shelves, and so many of the laity use. This list is by no means exhaustive, but quite sufficient.

An excellent ointment for use, as curative of the seborrhœa, is one which is known, in at least three different dispensaries, as "Bronson's

Ointment," after my esteemed friend PROF. E. B. BRONSON, of the New York Polyclinic. It is made of

Hydrarg. ammon., ℈ij.
Hydrarg. chlor. mitis, ℈iv.
Vaseline, ad ℥ j.
M.

and when properly compounded forms an elegant pomade of the consistence of a Mayonnaise dressing, and effectual withal.

PINCUS* advises, in the first stage of alopecia furfuracea, the rubbing the scalp with a solution of bicarbonate of soda, strong enough to redden the skin, and following this with a compress and an oiled-silk cap to be worn all night. Unfortunately this stains the hair. In the second stage of baldness, when the hair-fall is pronounced, he advises the use either of

Tannin, gr. lxxx.
Ungt. rosæ, ℥ j.
M.

rubbed in every night, or of

Ol. sabinæ, gtt. v–xxx.
Alcohol, ℥ j.
M.

used in the same way. The latter he prefers, as it can be stopped for several weeks at a time, while the use of the former cannot be interrupted for more than six days. A hood is to be worn at night with either of these. The oil of savin often causes headache, nausea, vertigo, and sleeplessness, which interdict its use. PINCUS further advises the use of a lotion or ointment containing two to four per cent. of boracic acid, applied daily for two or three weeks, and then, after a pause of a few days, followed by an ointment of bicarbonate of soda, three to eight per cent. strength, for one week. Thus he alternates his ointments for one year.

LASSAR (Monatshft f. prakt. Dermat., 1882, i., 131) has had good results by washing the scalp with tar-soap daily, following with a wash of

Sol. hg. bichlor, (1 in 300),
Spt. cologne,
Glycerin, aa ℥ ij.
M.

Then the scalp is to be dried, and a one- to five-per-cent. solution of naphthol applied. Finally a 1½-per-cent. carbolized oil is poured over the head. I fear that we would have difficulty in persuading our patients to carry out so troublesome a procedure.

HEITZMANN, of our own city, reports (Transactions of the American Dermatological Society," 1885, p. 32) favorable results from the use of crude oleum rusci in an ointment of vaseline and paraffine, in ten to twenty per cent. strength. This is to be alternated with sulphur and white precipitate ointments.

PIFFARD (Jour. of Cutaneous and Venereal Diseases, June, 1885, p. 180) has had good results by using the following:

Picis liquidæ,
Olei lavendulæ, aa ℥ j.
Olei pini sylvestris, ℥ vj.
M.

In some cases sulphur is added at the commencement of treatment.

Resorcin has been recommended by IHLE. I have not found it so efficacious as other remedies.

In the treatment of these cases I have seen the best results follow the systematic care of the hair, the avoidance of frequent wetting of the hair, and the use of an ointment of precipitated sulphur in the strength of one drachm to the ounce of vaselin, applied every night for a week or two, and then every other night, until the scalp no longer is furfuraceous, and then once a week for months. If care is used in applying the ointment there will be no excess of sulphur showing on the hair.

*Virchow's Archiv, 1868, xliii, 305; also Berl. Klin. Wochenschrift, 1883, xx, 645.

THE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

The 38th annual meeting of the American Medical Association, at Chicago, on the 7th to 10th inst., inclusive, was very much like its predecessors, being smaller than some and larger than others. It was on the whole a very successful meeting, judged by the standard of success for such meetings made and and adopted. There was an attendance of upwards of twelve hundred, and it embraced doctors from the east and the west and the north and the south. Many of these were friends who had not seen each other for years, and it did them good to again strike hands, and, oftentimes in the pleasurable condition induced by a fluid which at a certain caravansary was warranted to be not less than seven years of age, to live over again some pleasant things in the way-back past. Men, too, who knew each other by their writings were introduced, and the peculiar feeling which comes over one when he sees before him an ordinary man in place of the great one whom he had associated with a certain name, was time and again experienced. Then, again, Chicago is a very great city—great in its crowded thoroughfares, great in its massive structures towering away up to meet the clouds, great in its magnificent boulevards, and great in many other directions which each delegate must particularize for himself. All these things combined to make the meeting successful. There were, too, of course, a number of papers read, but we venture to say that

they will give much more satisfaction when they appear in the transactions (where they may be read or not according to the inclination of the member receiving them) than when the same member was compelled, by courtesy at least, to sit listening to their reading in an atmosphere raised to a temperature of over ninety, and redolent of that well-known aroma which pervades a poorly ventilated hall. The scientific part, so called, of these conventions is usually not exactly what it should be, but usually the audience is either good-natured or quite resigned, and disturbances seldom exceed the limits permitted under recognized parliamentary restrictions.

A considerable portion of time of the general sessions was consumed by the reading of the report on the Journal of the Association, and the report of a special committee on changes in the plan of organization and by-laws of the Association. The report on the journal showed it to be "in a prosperous condition." The expense of its publication last year was $15,920.96, $2,758.95 of which sum was for editorial work. The receipts from subscriptions of non-members, from reprints and from advertisers aggregated $7,580.63, thus leaving $8,340.33 to be supplied from the treasury. The disposition of the report of the committee on changes in the plan of organization involved the meeting in one of the most complicated parliamentary snarls in the history of the body. It was difficult to decide in the turmoil whether the incompetency of the chair or the lack of parliamentary capacity on the floor, was most conspicuous. Evidently men may be renowned as physicians and know very little about the conduct of a public meeting. The wrangle was terminated for the day by the president's declaration that the adoption of the committee's report gave their recommendations immediate effect. On the following day this erroneous ruling was set aside by a special resolution, to which the chair itself assented.

The report of this committee considered a remodelling of the organization to conform to the plan of the British Medical Association. The difference in the size and geographical conformation of the two countries, however, rendered an adaptation of the British plan to this country impracticable, and after a critical study of the plans as they exist in other countries, the committee recommended no change in the present organization. The following amendment to the constitution was, however, advised: "Members by application shall consist of such members of the State, County, and District Medical Societies entitled to representation in the Association as shall make application in writing to the Treasurer, and accompany said application with a certificate of good standing, signed by the President and Secretary of the Society of which they are members, and the amount of the annual membership fee, five dollars. They shall have their names upon the roll and have all the rights and privileges accorded to permanent members, and shall retain their membership on the same terms."

This would enable one or all the members of recognized State or local Societies to become *de facto* permanent members of the Association without the expense of attending a meeting.

From the fifth section of the Constitution it is proposed to strike out the first paragraph relating to the Nominating Committee, and in its place insert the following, to create a general committee or council:

"The General Committee or Council shall be composed of two members from each State and Territorial Medical Society entitled to representation by delegates in this Association, and from the Medical Departments of the United States Army, Navy, and Marine-Hospital Service. They shall be chosen by the members registered and present at each annual meeting, from each State, Territory, and from the Medical Corps of the U. S. Army, Navy, and Marine Hospital Service, acting separately on the third day of each annual meeting, each delegation reporting the name of the members chosen, to the permanent Secretary of the Association on the same day, that they may be announced by him at the opening of the morning session of the fourth day. At the first election each delegation shall choose two members of the General Committee, one of whom shall serve one year and the other two years; and at each annual election thereafter one member shall be chosen to serve for two years; thus making the term of office of members of the General Committee, two years. It shall be the duty of the General Committee, thus constituted, to organize, by choosing annually a Chairman and Secretary, and such sub-committees as may be found necessary to facilitate the work that may be assigned to it; to meet annually at the place and on the day preceding each annual meeting of this association, and as often during that week as may be necessary; to nominate on the third day of each annual meeting all the general officers of the Association (none of whom shall be members of its own body), the members of the Committee of Arrangements, the Committee on Necrology, seven members of the Judicial Council, and three members of the Board of Trustees for Publication, for election by the Association; to recommend the place and time of holding the next annual meeting, and to consider and report upon all subjects that may be referred to it by vote of the Association, and particularly on all propositions involving the appropriation of money. The presence of one-third of the whole number of members elected to the General Committee shall constitute a quorum for the transaction of business. If at any annual meeting of the

Association it shall be found at the close of the general meeting of the first day that a quorum of the General Committee is not present, it shall be the duty of the President and Permanent Secretary to fill vacancies in the Committee temporarily, by selections from the lists of delegates registered as present from the States to which the vacancies belong."

At the annual meeting of 1883, the duties of the Committee of Publication were transferred, by resolution, to the Board of Trustees for journalizing the transactions. It is proposed so to amend paragraph three of section five of the Constitution, as to make it conform to the practice of the last four years in this matter; and to define clearly the powers and duties of the Trustees.

In addition to the above, the Committee proposes certain amendments to the by-laws.

Change Section II. of the By-Laws relating to the Duties of Chairman of Sections, to read thus:

"The Chairman of each Section shall prepare an address on the recent advances in the branches belonging to his Section, including such suggestions in regard to improvements in methods of work as he may regard important, and present, on the first day of its annual meeting, the same to the Section over which he presides. The reading of such address not to occupy more than forty minutes."

Hitherto these addresses have been made before the general meetings of the Association, but the pressure of business and the multiplication of Sections render this no longer practicable. To take the place of these addresses in the general meeting, another By-Law, to be numbered XIV., is proposed as follows:

"The Association shall annually elect, on the nomination of the Nominating Committee (or the Standing General Committee), three members of the profession, eminent in some of its departments, to deliver its address in the general session of the next ensuing annual meeting, one on some topic or topics relating to general medicine, another relating te general surgery, and the third relating to public medicine, including under that head, hygiene, sanitation, prophylaxis, education, and medical legislation; each of such addresses not to exceed one hour in its delivery."

Of the papers read before the Sections, we shall select, in the near future, such as are possessed of merit.

A notable feature of the meeting was the display, in the Exposition Building, by the various manufacturers of and dealers in medicines and surgical instruments. Each vied with the others in presenting an attractive display. To notice, even briefly, each of the exhibits in the beautiful collection would clearly exceed the limit of our space, and we must be content with the mention of the display of sections of the cinchona tree by Messrs. Parke, Davis & Co., of this city. These sections retained their natural covering of back and the fibre of the wood was made to appear through polished surfaces. The display was unique and was the center of attraction to the visitors to the building.

TREATMENT OF GONORRHŒA.

There are few diseases on the list of the ails to which erring human flesh is heir which are of more perennial interest than gonorrhœa. Notwithstanding the fact that the disease is like the poor, in that it is always with us, a ready means for its relief has not yet been discovered, and when a writer whose facilities enable him to speak with some degree of authority gives the results of his experience, interest in the subject is aroused. In the May number of the Journal of Cutaneous and Genito-Urinary Diseases, Dr. George E. Brewer has an article which is both readable in itself and contains some practical points derived from his experience in the out-door department of Roosevelt Hospital. In it Dr. Brewer details the results derived from a trial of several of the methods of treatment, which have commended themselves particularly to those who are committed to the germ theory of the causation of the disease. He recognizes the existence of two forms of urethritis, the specific and the non-specific, or the true and the false. The former is a peculiarly persistent affection, in spite of the most careful treatment; the latter is quite susceptible to treatment, and the readiness with which it yields to various methods of treatment has won for these methods a reputation to which they are not properly entitled. Non-specific, or false gonorrhœa, may result from contact with irritating vaginal discharges occurring during menstruation or in the course of a leucorrhœa, or it may follow also a mechanical irritation. The discharge in such cases may simulate very closely in appearance that of specific urethritis, or true gonorrhœa, and the microscope alone can determine between the two. The gonococcus, which is invariably present in true gonorrhœa, is absent in the false. Dr. Brewer has corroborated this fact for himself in numerous instances, and when he has failed to discover the bacillus his prognosis has always been favorable.

His methods of treatment to which special care was given with a view to determining which is the best, were continuous injections of hot water through a double catheter, retro injections of hot water, and retro-injections of a solution of corrosive sublimate in hot water. The retro-injections were made through a tube so perforated as to cause an immediate return flow. The result of the trials was to give de-

cided preference to the retro-injections of the hot solution of the corrosive sublimate, the strength of which was from 1:60,000 to 1:10,000. The force of the current is sufficient to cause the urethra to "balloon out," thus bringing the fluid thoroughly in contact with the diseased membrane and attacking any germs which might secrete themselves in the mucous folds. At least two of such applications were made daily. The apparatus employed consists of a tin pail, beneath which is fastened a platform for an alcohol lamp or Bunsen burner. The pail is connected by means of a pipe inserted near its bottom, with a long rubber tube terminating in a No. 18 flexible catheter. The patient having urinated, is seated on the edge of a chair over a large sized slop-jar or pail. The catheter, well oiled, is passed into the urethra about five inches and the current of water started. The water is at first about the temperature of the body, but is gradually raised until it becomes as hot as the patient can bear. About two quarts of the fluid are passed through at each sitting.

Of twenty-three cases of acute specific urethritis treated by the preferred method, the earliest improvement noted was at the end of the first day, and in no case was improvement delayed beyond the eighth day. The average duration of the purulent discharge was $10\frac{9}{10}$ days. The average time at the end of which all discharge ceased was $17\frac{1}{3}$ days. In the case of fourteen patients suffering from acute non-specific urethritis the average time at the end of which improvement set in was $3\frac{2}{7}$ days; for disappearance of pus, $6\frac{1}{7}$ days; for disappearance of all discharge, $7\frac{3}{4}$ days. The conclusions which the writer formulates are as follows: *First.*—That in uncomplicated cases of acute gonorrhœal urethritis, treated by prolonged and frequent irrigation with bichloride of mercury, recovery may be expected within two weeks; that this period may be considerably shortened by the early inauguration of treatment, by absolute rest, and by the avoidance of stimulants; that it may be indefinitely prolonged by irregularity in treatment, by inordinate physical exertion, and by indulgence in alcoholic and venereal excesses. *Second.*—That the retrojection of a hot solution of bichloride possesses all the advantages of the former procedure, and in addition causes a more rapid subsidence of the inflammatory symptoms, a greater feeling of comfort to the patient, and is attended with less annoyance and trouble. *Third.*—That in cases of acute non-specific urethritis, the favorable influence of each of these methods is strikingly apparent. *Fourth.*—That in cases of chronic purulent urethritis, no agent produces such rapid and permanent improvement as irrigation, especially when combined with astringents and heat. *Fifth.*—That the percentage of complications occurring in cases treated by these methods is far below that observed when the ordinary methods are employed.

Book Notices.

THE TREATMENT OF HÆMORRHOIDS, WITH GENERAL RULES AS TO THE EXAMINATION OF RECTAL DISEASES. By CHAS. B. KELSEY, M. D , Surgeon to St. Paul's Infirmary for Diseases of the Rectum; Consulting Surgeon for Diseases of the Rectum to the Harlem Hospital and Dispensary for Women and Children, New York.

A SKETCH OF THE MANAGEMENT OF PREGNANCY, PARTURITION AND THE PUERPERAL STATE, NORMAL AND ABNORMAL. By PAUL F. MUNDÉ, M. D , Professor of Gynæcology at the New York Polyclinic; President of the New York Obstetrical Society, and Vice-President of the British Gynæcological Society; Late Obstetric Surgeon Maternity Hospital, etc.
Detroit: George S. Davis.

These two paper-covered pamphlets are new members of "The Physician's Leisure Library," the issue of which was begun about a year ago, and which has met with such favor and extensive patronage by the profession. The conception of the library is unique, and we are not surprised that the work has taken so well. The pamphlets are of convenient size for carrying in one's coat pocket, and are by authors of national reputation in the subjects which they discuss.

The writers, moreover, have evidently been enjoined to dispense with all unnecessary verbiage, and it is astonishing to one who may not have given attention to the matter to discover into what small proportions most large books may be compressed when divested of all words not positively required to a proper elucidation of their subjects. In the pamphlet of 78 pages on the treatment of hæmorrhoids, for instance, DR. KELSEY has given us everything absolutely necessary. He could with ease have elaborated until he had produced a large volume, but to have done so would scarcely have benefited the reader. In the little book before us he gives us general rules for examination and diagnosis, discusses the varieties of hæmorrhoids, and their treatment by ligature, injections and clamp, respectively. The text is supplemented by eleven illustrations.

DR. MUNDÉ disposes of his subject in 110 pages, and the fact that he has done so is in itself a guarantee that the task has been properly performed. DR. MUNDÉ, besides being an authority in his specialty, is a very ornate writer, and his combination of pleasing diction and terseness of expression as displayed in the pamphlet, is quite remarkable. We can imagine no companion better calculated to both entertain and instruct during the vigils in a confinement case, than this little book. Its shape and appearance being something like that of the lighter literature. the young physi-

cian, particularly, does not lay himself open to the suspicion of "reading up the case," which he would be liable to create, to his disadvantage, were he to be caught poring over a more imposing volume. We can recall the times when a little book like this would have served a most excellent purpose, and to any reader who may feel the need of a word of counsel when labor is not exactly normal, we would commend DR. MUNDÉ'S pamphlet.

A MANUAL OF TREATMENT BY MASSAGE AND METHODICAL MUSCLE EXERCISE. By JOSEPH SCHREIBER, M. D., Member of K. K. Gesellschaft der Aerzte of Viennia; formerly Docent in the University of Vienna, etc. Translated, with the author's permission, by WALTER MENDELSON, M. D., of New York.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

Massage has, particularly within the past five years, been growing rapidly in favor as a therapeutic, as well as a hygienic agent. It assumes the existence in the system both of a latent force, which it is capable of liberating, and a certain accumulation of effete or unappropriated material, which, by inducing an increased flow of blood to the parts, it causes to be consumed. How much of truth there is in this assumption it is, of course, impossible in the present state of the our knowledge to determine. Massage is passing through the experience which was accorded electricity. It has passed from the exclusive employment by empirics, and is now coming to be recognized as a valuable means in certain definite conditions. Its proper employment implies a tolerably comprehensive knowledge of anatomy and physiology, and without such knowledge the most energetic manipulator fails to do good. It is not yet regarded as just the thing for the physician to apply it, and the difficulty of securing a massageur who has the proper mental as well as physical qualifications is the main obstacle to its general adoption. A study of the excellent work before us will, however, enable the physician to give to a person of ordinary intelligence such instructions as will meet the requirements of the majority of cases in which this treatment is indicated.

A PRACTICAL TREATISE ON RENAL DISEASES AND URINARY ANALYSIS. By WILLIAM HENRY PORTER, M. D., Professor of Clinical Medicine and Pathology in the New York Post-Graduate Medical School and Hospital; Curator to the Presbyterian Hospital. One vol. 360 pages, 100 illustrations.
New York: Wm. Wood & Co.
Detroit: John MacFarlane.

It would almost seem that the production of works on the subject of urinalysis, particularly, has been unduly stimulated during the past five years. The supply of literature on this subject has been very extensive, and some of the books are practically duplicates. When, therefore, another book is presented at this late day there should accompany it some *raison d' être*. In the case of the book before us the unusual experience of the author is given. During the past ten years he has made over a thousand post-mortem examinations of both human and animal subjects, with a special view to observing the pathological changes accompanying the kidney derangement presenting during life. Such a record as this it would be reprehensible not to place before the profession, and DR. PORTER has presented it in praiseworthy shape. The book is a more than ordinarily valuable one, and no physician who is interested in this special division of medicine can afford not to study it. It is very comprehensive in its scope and minute in its attention to details.

A PRACTICAL TREATISE ON OBSTETRICS. Vol. IV. Obstetric Operations. The Pathology of the Puerperium. By A. CHARPENTIER, M. D., Paris. Illustrated with lithographic plates and wood engravings. This is also Vol. IV. of the "Cyclopedia of Obstetrics and Gynecology" (12 vols.), issued monthly during 1887. Price of the set $16.50.
New York: Wm. Wood & Co.

This fourth volume of this comprehensive work is devoted to the various operations known to obstetricians, embracing a consideration of the use of the forceps, the filet, the lever, the induction of artificial labor and miscarriage, the Cæsarian section, Porro's operation, post-mortem Cæsarian section, symphyseotomy, and embryotomy. In addition to these puerperal fever comes in for exhaustive consideration. It is scarcely necessary to add that these subjects are treated in a manner in harmony with the most advanced thought. The name of the author will be accepted as a guarantee of this fact by the profession. The mechanical execution of the book is excellent, the letter press and illustrations being quite in keeping with the importance of the work.

Therapeutic Brevities.

DIURETIC WINE.—The celebrated "Vin Diuretique Hotel Dieu," as devised and frequently used by the great TROUSSEAU, has this composition:

℞ Digitalis, part v.
Rad. scilla, part viij.
Juniperis, part lxv.
Potassii acetatis, part l.
Alcoholis (90 per cent.), part c.
Vini albæ, part dcccc.

M. The squills, digitalis and juniper berries are to be broken up, and macerated for two weeks in the alcohol and wine, the mixture being frequently stirred. At the expiration of the fortnight, it is to be pressed, strained,

the acetate of potash added, and the compound filtered, when it is ready for use.

TREATMENT OF DIARRHŒA BY IODOFORM AND CHARCOAL.—PICCHINI treated eight cases of diarrhœa, with symptoms of fermentation, with the following:

℞ Iodoform, grs. 9.
Ether, ʒ 3ß.
Vegetable charcoal, finely powd., ʒ 3ß.
Glycerin, ad. ʒ 12.

The iodoform must be dissolved in the ether, and the powdered charcoal thoroughly mixed. After the ether has evaporated the glycerin should be added. To take in twenty-four hours, by teaspoonful or tablespoonful, suspended in a glass of water.—*Journal de Médecine.*

TALC DENTIFRICE.—VIGIER (Jour. de Méd. de Paris) recommends the following dentifrice:

℞ Talc, 2 ounces.
Cream of tartar, 78 grains.
Burnt alum, 78 grains.
Cochineal, 156 grains.
Essence of mint, 20 drops.

M. Powder carefully and finely. S.—Use as a dentifrice.

Medical Progress.

CALOMEL INJECTIONS BY A NEW METHOD IN SYPHILIS.—Notwithstanding the oft-repeated attacks of the opponents of mercury and the popular prejudice against it, that drug still remains, as it has been for four centuries, the one sovereign and indispensable remedy for syphilis. As KAPOSI said in his very able address before the *Kongress für innere Medicin* last year, the only distinct advances that have been made in the treatment of syphilis since the fifteenth or sixteenth century, with the sole exception of the introduction within the last fifty years of the use of the iodine compounds, have been in the direction of improved methods of administering mercury. Among these improvements KAPOSI assigns the first places to the development of the inunction plan and the introduction of hypodermic medication. There is reason to believe that in the direction last mentioned progress in this country has not kept pace with the advances abroad. The routine treatment of constitutional syphilis here, even by those specially concerned with the disease, is that commonly known as internal. Inunctions are much less in vogue than in Germany, and it is doubtful if one patient in a thousand is treated with hypodermic injections. Yet, of all the methods of administering mercury, the hypodermic seems to be scientifically the most correct and rational. By no other method can the remedy be introduced into the system with the same degree of precision as to quantity, and with none other are the phenomena of elimination by the urine so constant and uniform. While, perhaps, the inunction plan is equally effective in curing the disease, it is an extremely rude method, open to this objection—aside from the minor consideration of its inconvenience to the patient—that we have no certain knowledge as to how or in what quantities the mercury gains access to the system; whether it enters through the skin, and, if it does, by what avenues, or whether, as many maintain, it is inhaled by the lungs after its vaporization. When it is administered by the stomach, on the other hand, there is an objection that it is apt to derange the organs of digestion, and thus still further impair the nutrition, already so prejudiced by the disease. Furthermore, there can be no certain relation between the dose administered and the amount absorbed or assimilated.

But, while hypodermic medication has great advantages as to precision, in practice it encounters no inconsiderable difficulties. The affinity of mercury, in almost any form, for albumin becomes a source of danger to the vitality of the tissues when the drug is introduced in large quantity within a circumscribed space. It may then produce local irritation and even necrosis. Especially does this objection hold good when the simpler mercurials—such as the reguline form, the bichloride in solution, or calomel in suspension—are injected into the subcutaneous cellular tissue. Could this drawback be removed, the treatment of syphilis by hypodermic injections would leave little to be desired. Many mercurial combinations have been devised to accomplish this object, but the chemical difficulties are not easily overcome. The simplest plan and perhaps the one most commonly adopted, is to add sodium chloride to a bi-chloride solution, so as to form a double chloride of sodium and mercury, which is supposed to be an approximation to the form under which mercury incorporates itself with the tissue fluids. The bicyanide solution (1 to 1,000 or 2,000), introduced by CULLINGWORTH, is largely employed in Europe, and is said to be much less irritating to the tissues than the bichloride. Good results seem also to have been obtained with BAMBERGER'S albumin and peptone combinations, but they only partially accomplish the object, and the difficulty in preparing them has been found an obstacle to their general use. A few years ago LIEBREICH of Berlin, proposed a soluble compound of mercury with formamide, under the name of *hydrargyrum formamidatum solutum*, for which he alleged special chemical advantages by reason of which irritation was avoided and the absorption and elimination of the mercury were decidedly facilitated. The elimination through the kidneys reached its maximum in six weeks, while after the use of sublimate injections eighteen weeks are required, or, when it is combined with sodium chloride, thirteen weeks. After calomel injections, and also after mercurial inunctions, elimination goes on much more slowly, not reaching its maturity, it is said, until six months have elapsed, and, according to BALZER ("Gaz. des hôp."), it may continue for two or three years.

Undoubtedly calomel, when injected into the tissues, is absorbed very slowly, in consequence of which a mercurial remains in the system for a long time before it is eliminated.

For this reason, it has been alleged, calomel possesses certain special advantages over other forms of mercury for hypodermic injection. Its slower absorption makes fewer and less frequent injections necessary. Its longer continuance in the system gives greater permanence to its effects, and hence, it is alleged, syphilitic relapses are less likely to occur after its use. The hypdermic injection of calomel, as first proposed by SCARENZIO, of Pavia, had fallen into almost complete desuetude on account of the frequency with which severe local inflammation and often abscesses were produced. But recently certain modifications in the method, proposed more particularly by SMIRNOFF and NEISSER, have revived the practice, and in many quarters it is receiving a good deal of attention. The calomel, which is suspended in mucilage or oil, instead of being injected hypodermically, is thrown deep into the muscular tissue, usually in the region of the glutei. The point selected for the introduction of the needle is in the depression at the side of the natis, three centimeters behind the trochanter major. The number and frequency of the injections vary with different practitioners. BALZER uses the calomel suspended in oil of vaseline (three quarters of a grain to fifteen grains), and makes the injections at weekly intervals, on an average eight in all. Others make the injections only at intervals of three weeks, and assert that four or five injections are all-sufficient. According to NEISSER'S formula, sodium chloride was added to the mucilage mixture, by reason of which the canula of the syringe is less liable to be clogged and the local irritation is diminished. LANTZ'S mixture ("St. Petersburg med. Wochenschrift") consists of from eighteen to twenty-four grains each of calomel and sodium chloride, from nine to twelve grains of gum arabic, and three drachms of distilled water—this quantity being sufficient for twelve injections containing from a grain and a half to two grains of calomel each. Often as much as three grains of the mercurial salt is injected at once.

With regard to the results of this method of treatment, the reports of those who have given it a trial are not all in accord. Some, while denying that any inconvenience attends it greater than or even as great as those incident to any form of hypodermic medication in syphilis, laud it as superior to all other plans, not only on account of its simplicity, but because of its pecular efficiency against the disease. Accepting the representations of some of these advocates, we might fairly conclude that older methods were to be entirely superseded, and that the introduction of the new method marked an epoch in the history of anti-syphilitic therapeutics. Unfortunately, we have other reports in which the picture presented is in less glowing colors. LANTZ, who seems to have given the method a thorough and impartial trial, reports some objections to it that are by no means inconsiderable. Comparison was made more particularly with the peptonate and formamide solutions of BAMBERGER and LIEBRICH. Patients who had already been treated with these latter complained invariably that the calomel injections were more painful. Abscesses were not of infrequent occurrence, and occasionally the irritation was such that the whole gluteal region became swollen and inflamed. Moreover, salivation was relatively frequent. It is possible, however, that much of the local irritation may be avoided by stricter attention to technical details. It is said that the production of abscesses is often due to the escape of some of the injected fluid into the subcutaneous cellular tissue instead of its being wholly deposited within the muscle.

With regard to the alleged freedom from relapses after this treatment, the evidence is insufficient. It is not easy to determine such a point with the constantly shifting "material" of a hospital practice. As suggested by DIDAY ("Lyon médical"), the best sphere for such an investigation is the medical department of an army, where the subjects treated can be under observation for long periods of time. For the present, we may look upon the new method, if not as a new weapon, at least as a new string to the bow which has long stood us in stead as our most effectual arm against a dreaded and insidious disease.—*N. Y. Med. Jnl.*

THE FLUORIDES OF AMMONIUM AND IRON IN HYPERTROPHY OF THE SPLEEN.—JOHN LUCAS, M. D., F. R. C. S., in the Practitioner, June, 1887, says: Believing, on physiological grounds, that the fluoride salts would probably prove as efficacious in the treatment of chronic splenic hypertrophy as hydrofluoric acid has done in the treatment of bronchocele at the hands of DR. WOAKES, I gave the former a trial a few years since and conducted a series of therapeutic and clinical experiments of which I here propose giving a brief summary. Hypertrophy of the spleen is, as the reader is aware, very frequently met with in India both in hospital and private practice, but more especially in the former among the poor. I preferred the salts to the acids because they are less unstable. The ammonium fluoride (NH_4F) is prepared by saturating a solution of hydrofluoric acid (HF) with ammonia (NH_3), and allowing the mixture to evaporate over quick-lime. The fluoride of ammonium crystallizes in hexagonal prisms, dissolving readily in water, and the solution is colorless, but it acts on glass (for chemical reasons which I need not enter into here), going through it and escaping. To prevent this escape the expedient of coating the inside of the bottle with wax, so as to prevent the unstable compound in solution from coming in contact with glass, has to be resorted to; or the solution may be kept in india-rubber tubes or gutta-percha bottles. I adopted the first-named plan, and did not cause more of the solution to be made than was actualiy wanted for use. The strength of the solution employed by me was four grains to the ounce. Of this *liquor ammonii fluoridi* I began with 5-minim doses, diluted in an ounce of water and administered thrice a day after meals, and the dose after a day or two may be increased to 8 minims, then to 10, 12, 15, 18, 20, and so on at intervals of a few days, the increase being effected gradually and cautiously; the great point to attend is to ensure the taking of this medicine after food, as otherwise gastric and intestinal irritation will be set up, while with this precaution it will be found to be fairly well tolerated in the majority of cases.

Before proceeding to the narration of a few of the cases in which it was employed after the physiological action had been experimentally tested, it will, perhaps, be as well to give here

a brief account of the treatment of hypertrophy of the spleen which hitherto has been in vogue. First of all we have had the time-honored antiphlogistic method in the form of *leeches* and *purgatives*. These were employed by MR. TWINING from a very early period in the history of medicine. Then we have *quinine* and *iron:* for these we are indebted to the late DR. MOREHEAD, the luminary of the Indian Medical Service. The *modus operandi* of quinine has been explained by PROF. BINZ, of Bonn, and again recently by PROF. TOMMASI-CRUDELI, of Rome. The *biniodide of mercury* has been a favorite remedy, and for this credit is due to DR. MACLEAN, the late veteran physician of Netley. *Ergot*, hypodermically, is a favorite with the American physicians. DR. DA COSTA gave prominence to it, and it has been employed successfully in India. The plan is said to be attended with success. *Ergotine* in like manner has been injected into the spleen, but the success attributed to it is not unattended by risk. *Iodide of potassium* has been tried with little or no advantage. In some cases it has, however, apparently succeeded, while in others the results have been disappointing. The application of *cold water* as a *douche* has been recommended by DR. WOOD, of New York. Here I note that in some cases of typhoid fever in 1881, treated with the cold bath and affusion and wet sheets, the topical action of cold water was noticed and recorded at the time as having a decided and marked effect in reducing the size of the enlarged and softened spleen, and actually relieving pain in it. Some authorities have written on the subject of *electricity*, and so galvanism has played a part in the treatment of splenic enlargement. DR. GOWERS, I may mention, is the highest authority in its favor. The effect has, however, since been shown by DR. VIVIAN POORE to be only a transient reduction in the size of the spleen, and that it is altogether inefficacious as a curative measure. DR. MOORE, of New York, wrote highly of *salicylic acid* and *salicin*, and some remarks regarding their employment and the salicylates were published by the present writer also. For enlarged spleen *kneading* with the hand is a very old plan, especially in the West Indies. I am not aware of any recorded instances of *massage* (to use the modern term introduced by DR. WEIR-MITCHELL, of Philadelphia, and subsequently brought more prominently before the profession by DR. PLAYFAIR, a former member of the Indian Medical Service), being therapeutically resorted to for enlarged spleen, but would be inclined to think it is not without risk.

After narrating the history of six cases, the author continues:

Certain physiological effects, more or less common to all the cases, were observed. Briefly, there was a marked influence on the blood-pressure, which had a downward tendency at first; the pulse fluctuated and the number of beats was lessened. In this respect my experience was quite in accord with that of DR. COATES. It was also found that the drug possessed antipyretic properties when the temperature ranged above the normal point, and it prevented attacks of ague, thus proving it to be an anti periodic. DR. COATES writes that he did not notice this action. In all the cases it produced nausea at first, though gradually a sort of tolerance appeared to have been established, and the drug could be borne in much larger doses. It produces some intestinal irritation, probably acting more on the duodenum, and giving rise to some diarrhœa. I am not sure that it has any action as a hepatic stimulant. The appetite after a time improves under its use. Almost all the patients complained of a pricking or twisting pain or uneasiness in the spleen itself, the original pain being sometimes aggravated. When given carefully after meals, which should be the invariable rule, it is better borne and does not produce nausea and purging to the same extent. It certainly seems to excel any other method of treatment with which we are acquainted. It is a new remedy in this connexion, and I would solicit trial and report on it by physicians in this country as well as India, and not only in the treatment of splenic hypertrophy, but also in that of goitre. Although I began with small (5 minim) doses, I should be disposed to start with 20 or even 30 minims diluted in an ounce or two of water, and administered always after a meal. The combination of iron with hydrofluoric acid, I am inclined to think, would prove more valuable on account of the hæmatinic properties of the former, and because as an adjunct it would exercise its astringent and tonic influence on the mucous lining of the stomach and intestines, and thus in a great measure tend to counteract the unpleasant effects complained of, and perhaps also to augment the evident specific action on the spleen. The fluoride of quinine can easily be prepared, and so also can the triple fluoride of iron, quinine and ammonium.

EPIDEMIC DYSENTERY.—In an article appearing in Progress, February, 1887, DR. STEELE BAILEY thus considers the treatment of epidemic dysentery:

As to the treatment of epidemic dysentery there is no specific, and the course to be persued is purely empirical. Than the present, there has been no period in which a greater number of reckless assertions have been made in reference to "specific remedies," and the disease under consideration is a plucked plum" for which countless remedies have been suggested.

Our crude pathology delights in new remedies or remedies with new names, therefore the prudent will exercise caution and hold fast to the good, if it be old Epidemic dysentery being enumerated among miasmatic diseases, and essentially infectious, and clearly depending for its propagation upon local cases, the inference is plain—administer those remedies which experience has taught are beneficial.

There can be no routine. The famed ipecac may find a place in sporadic dysentery, but in the epidemic disease there is usually too much gastric disturbance for its employment. Permit me to relate briefly the clinical history of LAURA DOLLINS, and the treatment given her. This was a typical case in a very healthy girl, sixteen years of age, the second in her family to sicken and to die. Two days before the death of her brother, whom she had faithfully nursed, she complained of laxity of the bowels; the secretions consisting of altered biliary matters, with an occasional streak of blood, the diseased process being then in the upper part of the intestines. The day he was buried, her

symptoms, augmented by mental distress, were serious. The peristaltic movements were violent, irregular, and spasmodic; there were shifting pains and urgent tenesmus, the stools consisting almost entirely of pure blood. The vomiting was distressing, and almost incessant, for three days, which prevented the administration of remedies per os. Iced drinks, rice water, and the mucilage of elm were given at will. Ice compresses to the abdomen were very agreeable; but when spasms were present hot applications gave ease. We used morphia and atropia hypodermatically to give rest and sleep. For the first few days the fever seemed to be of the remittent type. The temperature in the hours of the morning varied from 101° F. to 102½° F.; later in the day, and at night, the register would show one or two degrees higher. I saw the fever at 105° F. on the sixth night of her illness. The weather was very hot, and the air in her small room stifling.

As the disease progressed, the exudative matter resembled the washings from putrid beef, mixed with blood and pus. The disease now had evidently passed the ileo-cæcal valve and extended into the small intestine. The belly was tender and tympanitic. The stomach now permitted her to partake of meat broths; but the mouth and tongue were dry and encrusted, sordes covered the teeth and gums, so that which she ate was taken mechanically. Headache and delirium were observed during the night; the countenance was an ashen hue, with a red spot in the center of each cheek; the attendant fever was now like typhoid. Liquid belladonna leaf, the normal liquid of Parke, Davis & Co., commencing with two minims and increasing to five, six or seven minims, gave me more satisfaction, and, I think, the patient more relief from the nausea than anything else.

The stools were frequent, and the pain was cruelty personified. The mind was clear, and a recklessness, which, upon being enquired after, she referred to the impending doom. The variations in the thermometrical record, on the tenth, eleventh, and twelfth days, were slight, but the pulse change was very observable—a change produced in the nutrition of the cardiac muscular structure from the high temperature.

On the fifth day, even, a skilled finger would bring out the fact that many intermediate pulsations had been overlooked, and while there was less frequency of the pulse at that period, it presented the dangerous quality of varying in force from moment to moment, and that in an unrythmical manner. It seemed that each day brought increased tendency to stool; the thirst, restlessness, and jactitation were extreme.

The inclination to vomit, on the thirteenth and fourteenth days, was still present, and a bluish fluid came at each effort. The physical distress was great; she was the picture of anguish and despair. The vital powers were depressed beyond the system's recuperative capacity.

Every line of therapeutic attack had been futile. Gasping, she rose into a sitting posture the better to get her breath, when suddenly a heart-clot formed, and she expired.

As a general thing, in the treatment of the eleven cases, I endeavored to remove spasm and reduce inflammation, and searching the literature of the subject, which is enormous, and hearing in turn the praises of indigenous materia medica, as well as that of foreign growth. I am settled in the belief that there is nothing comparable to that treasure-trove, opium, and its derivative compounds. The others have gone, like JONAH'S gourd, which came up in a night, and perished in a night. A single case terminated very happily (though it had commenced with some violence) from the administration of thirty grs. of hydrate chloral, in conjunction with half an ounce of Epsom salts. He awoke from a long nap, ate mutton broth, remained at rest two days, when he had no further trouble.

In the preliminary stage the same principles of treatment are of service as in idiopathic dysentery; but a more direct one is soon called for, the disease quickly assumes dangerous symptoms.

With the temperature elevated, and the saliva limited in secretion, plenty of fresh air, iced drinks, and the farinaceous elements of food, given in an assimilable form (and nothing is better than arrow-root), constitute excellent treatment; much better, especially when there is gastric distress, than any food containing fats, which is often repugnant.

When the stomach permitted, animal broths were given, and as the patient advanced into full convalescence, I fed him, not by mathematics but by gastronomy, exercising, however, a healthy caution.

In one of my patients imprudent indulgence brought its own punishment, a relapse. Milk, to her, was repulsive, therefore an exclusive diet of beef peptonoids was recommended, under which her health was fully restored.

MATERIA MEDICA OF THE EUCALYPTUS OILS. —In an article published in the March, 1887, Chemist and Druggist WM. SUTHERLAND, M.A., B.Sc., gives the following interesting facts about the eucalyptus oils which have been proved to possess valuable anti-malarial properties:

The oil in common use is the essential oil of eucalyptus amygdalina, but there is no ostensible reason why the mallee oil should not be quite as acceptable. The first effect of the oil when taken internally to the extent of 10 to 20 minims, is to stimulate the cerebro-spinal nervous system, large doses produce genuine intoxication which passes into unconsciousness and heavy sleep; the reasonable antidote for an overdose is therefore a cup of strong coffee. The oil possesses more powerful antiseptic properties than phenol (carbolic acid), and is accordingly used in an antiseptic spray, and for antiseptic dressings; it is not so irritating as phenol, but possesses sufficient inflammatory power to render it a good rubefacient if applied with friction. Considering its powerful antiseptic effect, its poisonous action when taken internally is remarkably mild, so that there is no danger from its absorption by even a large wound surface; when it is carefully purified as much as ¼ oz. can be taken diluted with no more serious results than considerable depression. An idea of its antiseptic powers may be gathered from the fact that 1½ parts in 1000 arrest the development of bacteria in a vegetable infusion. Its effect on the blood is power-

ful, it diminishes the power of the red corpuscles to absorb oxygen, as can be shown by the darkening of red blood when even very dilute eucalyptus oil is added to it; it also destroys the contractility of the white blood corpuscles. Many small animals are paralyzed by the mere vapor, so that the value of eucalyptus oil as an anthelmintic or vermifuge can be understood. The following formulæ were given by MR. BOSISTO in a paper on the "Materia Medica of the Eucalyptus" published in the Australian Medical Journal, 1885, p. 441:

For rheumatism, sciatica, lumbago, asthma and sprains requiring a strong liniment: Ol. Eucalypti, ʒ iv., vaseline ʒ ij. Misce. For the throat when it requires a mild liniment: Ol. Eucalypti ʒ iij, Ol. Olivae ʒ j. Misce. The addition of the olive oil prevents irritation of the skin. The vaselin is to be warmed before mixing.

In its internal use for coughs, asthmatic difficulty of breathing or sore throat, 5-drop doses on loaf sugar are recommended to be taken occasionally. For stronger doses: Ol. Eucalypti ʒ j., Pulv. Gum Acaciæ ʒ iij., Saccharum ʒ ss., Aq. Cinnamon, ad ʒ iv. Misce. Dose ʒ ss. for an adult every four or six hours. Or the following may be used: Ol. Eucalypti, ʒ j., Infus Lini., ʒ iiss., Syrupus ʒ ss. Misce. Dose as above. As an anthelmintic 30 to 60 minims of the oil in mucilage of starch are to be administered by enema.

On the continent a eucalyptic tincture is the commonest form in which eucalyptus oil is used, but besides the oil this contains a bitter febrifugal principle, and traces of resins and acids which in the ordinary process of distilling eucalyptus oil are kept back in the mother liquor of the stills. The tincture is prepared by bruising three ounces of fresh leaves, and covering them with six ounces of absolute alcohol, in which they are digested at a moderate temperature, in a well-closed vessel, for fourteen days, at the end of which the leaves are well pressed and the liquid filtered. This preparation has decided antipyretic properties, a fact which along with its bitter taste led its first investigators to believe that eucalyptus leaves contain an alkaloid like those of the cinchona bark, but this idea was soon dispelled. However, there is no doubt that this tincture possesses some of the properties of quinine; thus by actual experiment it has been found to exercise a contracting effect on a dog's spleen, which is the action of quinine. In cases of malarial fever eucalyptic tincture is considered to rank next to quinine as a remedy; in many cases where quinine fails it proves successful, and it possesses the decided advantage of being much cheaper and less troublesome in its after effects. In the continental preparations of the above tincture the leaves of *E. globulus* are always used, but there is no information to be had as to the tinctures to be obtained from the leaves of other oil-yielding species. As has been said before the name *globulus* carries a glamour with it which there is no proper experimental evidence to justify. Until the systematic details of comparative experiment are given, the preference given to globulus preparations must be regarded as arbitrary and accidental. There is certainly room here for an interesting piece of pure pharmaceutical research which ought to occupy the attention of some of our more scientific Australian pharmacists.

EUPHORBIA HETERODOXA.—This Brazilian euphorbiaceous plant, the alveloz, the milky juice and resin of which have been recommended as a cure for cancer and ulcers of a malignant type, destroys morbid tissue without much pain, but causes smarting on healthy flesh. I may state that in all the cases I have used it in it has acted on the kidneys.

The first cancer case I treated with alveloz was in October, 1885.

This patient lived three months in comparative ease, but eventually died from acute peritonitis. Her husband told the writer that, although he knew it was a hopeless case, still the alveloz had saved her "ten thousand pains" she would have suffered if it had not been used. He said: "that alveloz is not only worth its weight in gold but in diamonds."

DR. HAMILTON, in his letter, makes reference to some of the samples of alveloz as being worthless. I beg to indorse that statement as being only too true, as I have at present in my possession an imported bottle, marked Alveloz Milk, with THOMAS CHRISTY & CO.'s label on it, 155 Fenchurch Street, London, England, which has no virtue in it whatever. It looks like vaseline. [The energetic alveloz looks like pale butter, with the consistence of vaseline. The phials hold six grammes (ʒ jss.), and cost $6.50 each.] To be sure I was correct, I applied to the face of a patient I had used the good alveloz on, and next day she told me it neither acted on her kidneys nor did it smart around the sore as the other did. It is a shame that men, for the sake of a little gain, will adulterate costly drugs; but I cannot believe that an eminent drug house like CHRISTY'S would countenance such a thing; it must have been done before they received it. As the virtue of this drug lies in the resin, I suppose there is no resin in my sample. The resin is obtained by treating the alveloz with water, and afterward with absolute alcohol.

Formula for use:
Resin, 1 part;
Vaseline, 33 parts.
Mix, and apply to the part affected.

In my first case I used the drug simply, and did not even put an absorbent cotton tampon in the vagina, as I wanted to see what it would do, and govern myself accordingly in subsequent cases; hence, this may account for the burning the patient complained of in her vagina. Now I tampon in all cases, and my patients do not complain of that intense burning. I prepare my tampons by saturating them benzoic acid dissolved in alcohol. I use them dry, and pack them against the cancerous mass, and it acts as a disinfectant to the discharges as they are absorbed. After all the cervical cancerous growths have been removed, I then saturate the tampons with resorcin dissolved in glycerin (one to seven), and apply after the alveloz has been placed in the uterus. It seems to act very nicely, causing the stump to heal over.

My principal object in writing this article is to bring before the medical profession the fact of the absorption and peculiar action of this drug on the systems of those afflicted with cancer, as I do not think it has been mentioned by any writer on the subject, and hope that those gentlemen who are experimenting with

the drug will carefully watch the alterations in the urine microscopically and otherwise, and perhaps they may be able to solve the problem which has baffled the proffession to the present time.

With our present knowledge of the drug I do not believe that an old standing case of cancer, where the whole pelvic cavity is involved, can be cured by the topical application of the medicine, even if by absorption it seemingly attacks the constitutional infection (if we are to judge by the offensive discharges from the kidneys after each application, and the sudden cessation of those discharges when the drug is not used, and the clearing up of the skin while those discharges are going on, and the feeling of lightness patients say they feel under its use, when before they complained of a tired, weary lifeless feeling, and often wished that death would end their sufferings); but we shall have to look to some other form of the drug as an adjunct, and give it hypodermically, so that we shall be more likely to avoid inflammation of the gastro intestinal mucous membrane, and the dangerous and sometimes fatal prostration which follows the swallowing of any of the products of the euphorbiaceæ.—JAMES BARNSFATHER, M. D., in *N. Y. Med. Journ.*

THE TREATMENT OF EPISTAXIS BY COUNTER-IRRITATION OVER THE HEPATIC REGION.—In a letter to the London Lancet ALEXANDER HARKIN, M. D., F. R. C. S., thus emphasizes the value of counter-irritation in epistaxis:

I was much pleased to observe in a letter from your Paris correspondent, dated April 27th, that at a recent meeting of the Academy of Medicine M. VERNEUIL read a communication upon the treatment of certain forms of epistaxis by counter-irritation over the region of the liver. In the first case related by M. VERNEUIL, quinine, ergotine, and digitalis had all been tried in vain. In the second plugging had failed. The third had been the subject of chronic nephritis, with secondary affections of the heart and liver, and the cavity of the nose had been plugged without effect both with ergotine and the perchloride of iron. M. VERNEUIL'S treatment, which was immediately and permanently effective, consisted in the application over the region of the liver of a large blister. M. VERNEUIL had at first thought that the method was entirely his own, but from bibliographical research it turned out that it had been anticipated to a certain extent by GALEN, who says that large cupping glasses applied to the hypochondriac region arrest nasal hæmorrhage. To me it is very satisfactory to learn that a mode of treatment practised by myself successfully for many years, and reported in The Lancet of Oct. 30th, 1886, with cases in illustration, has also been advocated by so eminent an authority in continental medicine, and as far as he was concerned, independently of any suggestion from another. I am quite sure that, in his case any more than my own, the dictum of GALEN had nothing to do with its origination. It is of more importance that the remedy, which is undoubtedly of the utmost value, should be more generally adopted, especially when its application is urged not upon merely empirical grounds, but in accordance with accepted pathological teaching. That your correspondent did not appear to be aware of my previous pronouncement on the subject arose possibly from the fact that my publication did not take the form of a monograph with specific heading, but as a portion of a paper treating of congestion of the liver, and protesting against the impolitic interference of modern surgery with the sanitary efforts of Nature when through the medium of hæmorrhage from the hæmorrhoidal veins or the mucous lining of the nostrils she endeavors to lessen the turgescence of an important viscus. In illustration of my views, I gave the particulars of a case of vicarious bleeding from the under lip, which arose immediately after the de ligation of hæmorrhoidal tumors with excessive bleeding, ultimately cured by blistering over the liver; of a second example, in which dangerous and profuse hæmorrhage from piles was immediately cured by a similar remedy; and then, in pursuance of my theme, appended the cases of three young men suffering from epistaxis, who were instantly relieved by blistering over the hepatic region. A remarkable case, which occurred during the recent riots in Belfast will further illustrate the subject: While paying my morning visit to a straw lodge, a temporary barracks improvised for the members of the Royal Irish Constabulary, and accompanied by one of the officers, I found one of the men in bed with a handkerchief saturated with blood, which had flowed from his nose during the greater part of the previous night. On satisfying myself of the nature of the illness, I painted the man freely with the liquor epispasticus over the region of the liver, prescribing no other remedy but rest in bed. On our revisiting the man next day, he informed us that from the moment the blister began to pain him the hæmorrhage declined, and left him altogether a short time after. To quote from my paper: "The frequent occurrence of epistaxis in youth is evidently due to the excitement and hyperæmic condition of the liver and digestive organs during the period of active growth and the constant demands upon its functional activity. The liver at this stage closely approximates to the condition in after-life, which is the casual factor in the development of piles, and as such is equally amenable to treatment in accordance with etiological principles; the derivative that cures the hæmorrhoidal flux as certainly puts an end to the epistaxis, the outcome of hepatic congestion."

THE INFLUENCE OF TEA, COFFEE AND COCOA ON DIGESTION.—DR. JAMES W. FRASER, in a recent number of the Journal of Anatomy and Physiology, has recorded the results of an interesting series of experiments on the action of our common beverages on stomachic and intestinal digestion. The experiments have been most carefully arranged from a physical standpoint, and give us some valuable hints on the digestion of the chief alimentary principles, but they have no bearing, it should be mentioned, on individual variations of human digestion, or on the influence of the various glands in preparing the gastric or intestinal juices. They are, however, of much value in showing how standard preparations of the peptic and pancreatic ferments are modified in

action when our ordinary daily beverages are allowed their free action on the digestion of various articles of food. The digestive processes were carefully investigated, and absorption was imitated by a proper dialyzing arrangement. An artificial peptic juice, and afterwards an artificial pancreatic juice, were employed, and the amount of nitrogenous matter dialyzed was most carefully estimated. The food stuffs experimented on were raw and cooked serum and egg albumen, raw and cooked myosin, syntonin, alkali albumen, casein, gluten, starch, and oleine. The results obtained from an exhaustive series of experiments and analyses show that all the three typical infused beverages—tea, coffee, and cocoa—retard the digestion and absorption of all the nitrogenized proximate principles of dietetic substances when peptic and pancreatic digestion are taken together, and that they uniformly retard peptic digestion, although tea may assist the diffusion of peptones from the stomach. Pancreatic digestion is also uniformly retarded, and diffusion thereafter is but rarely assisted, so that neither of them compare advantageously with water as a standard beverage for experimental investigations. A summary of dietetic advice is added to DR. FRASER'S observations, which will, in the main, agree with that which is now given by our best authorities in cases of dyspepsia; and we are glad that experimental inquiries afford so strong a basis of support to empirical clinical observations:

1. That it is better not to eat most albuminoid food stuffs at the same time as infused beverages are taken, for it has been shown that their digestion will in most cases be retarded, though there are possibly exceptions. Absorption may be rendered more rapid, but there is a loss of nutritive substance. On the other hand, the digestion of starchy food appears to be assisted by tea and coffee; and gluten, the albuminoid of flour, has been seen to be the principle least retarded in digestion by tea, and it only comes third with cocoa, while coffee has apparently a much greater retarding action on it. From this it appears that bread is the natural accompaniment of tea and cocoa when used as the beverage at a meal. Perhaps the action of coffee is the reason why, in this country, it is usually drunk alone or at breakfast, a meal which consists much of meat, and of meats (eggs and salt meats) which are not much retarded in digestion by coffee. 2. That eggs are the best form of animal food to be taken along with infused beverages, and that apparently they are best lightly boiled if tea, hard boiled if coffee or cocoa, is the beverage. 3. That the casein of the milk and cream taken with the beverages is probably absorbed in a large degree from the stomach. 4. That the butter used with bread undergoes digestion more slowly in presence of tea, but more quickly in presence of coffee or cocoa; that is, if the fats of butter are influenced in a similar way to oleine. 4. That the use of coffee or cocoa as excipients for cod-liver oil, etc., appears not only to depend on their pronounced tastes, but also on their action in assisting the digestion of fats.—*Lancet*, May 7, 1887.

PIPERONAL.—Piperonal is the aldehyde of piperonilic acid, which is obtained from the oxydation of piperine. It crystallizes in small colorless prisms. Its odor is thal of vanilla; its flavour like that of menthol, but more lasting. It is insoluble in cold water, but soluble in alcohol and ether. DR. RICCARDO FRIGNONI first discovered its remarkable antipyretic properties. It is given in doses of 75 centigrammes every two or three hours. When given in larger doses, it causes nausea and eructations, but produces no more serious results. It is principally valuable as an antiseptic.—*British Medical Journal*, April, 1887.

CALOMEL HYPODERMICALLY.—M. BALZER in a communication to the Société di Biologic, recommends the following formula for the hypodermic use of calomel in syphilis:

℞.—Calomelanos, 0.50 centigrammes;
Vaseline, 10.00 centigrammes;

The case in which M. BALZER first used this method, had resisted mercurial preparations by rubbing, by lotion, and given internally in the form of pills. He allows eight hours to elapse between each injection. The result in five cases have been most satisfactory.—*La Presse Médicale Belge*,

NJIMO WOOD.—Njimo Wood is a new drug from Western Africa, derived from Sarcocephalus Esculentus, one of the Cinchonaceæ, which may possibly find a place in the materia medica. The natives use it in all cases of gastric troubles, loss of appetite, etc., and it furnishes, similarly to the Coca leaves of America, a pleasant stimulant much in request with the negroes.

Experiments made with an extract obtained from the wood, with a view to determining the amount of alkaloid, did not succeed; a resin and bitter principle only were isolated.—*Pacific Record*, April 15, 1887.

PHENATE OF COCAINE.—VIAU, of Paris, has mixed one part of phenic acid to two of cocaine, heated gently, and obtained a substance which gave good results in eighty-six cases of extraction of teeth, by producing local anæsthesia. The substance is injected in solution by a fine syringe into the tissues about the teeth, care being taken to avoid the dropping of the substance into the pharynx, after which the mouth is rinsed with cold water. Local anæsthesia is generally sufficiently advanced to allow extraction in five or ten minutes.—*Les Nouveaux Remèdes.*

GRINDELIA ROBUSTA IN WHOOPING-COUGH.—At the last meeting of the Societe de Therapeutique, M. BILHAUT read a paper on the use of an American medicine, *Grindelia robusta*, in the treatment of whooping-cough. He stated that it arrested the vomiting, made the expectoration less viscid, and then caused a diminution in the intensity and the frequency of the attacks of coughing. It was found palliative in some cases, but really curative in others.

The Medical Age.

Vol. V. DETROIT, JULY 11, 1887. No. 13.

Original Articles.

SYPHILITIC ERUPTIONS.

BY C. C. YEMANS, M. D., DETROIT, MICH.

Gentlemen: This patient is 30 years of age and apparently in robust health, well nourished, and no indications, so far as now apparent, of any serious lesion of any kind. He has, however, suffered from a disease of the skin for a long time. This disease is hidden away under clothing, is productive of very great discomfort, and holds the patient with constant fear as to what may be. In cases of this kind it is not uncommon for the patient to be apparently in the best of health with good and substantial reasons for grave fears as to the future. When he removes the dressing from his feet you will observe that the plantar surface of both is reticulated through the thick epidermis and leaving apparently the corium exposed to the action of the atmosphere, causing lameness; and more than this, his sleep is lost at night by the constant itching of this surface, so that not only his walking is materially interfered with, but his rest is broken and it (the lesion's) duration must of necessity—unless some successful method of treatment is employed—result in serious injury to his general health, possibly in death. Now this surface of the feet requires very close inspection and accurate diagnosis. Many of the symptoms point directly to eczema; some of the objective signs point directly to syphilis and some to psoriasis. Within these three we have included, evidently, the correct theory as to a diagnosis, but which is it ? The importance of answering this question correctly is apparent when you reflect. If it is eczema, you have a present troublesome local lesion, which, for the most part, and as I think, generally, requires but local remedies and applications, and even then this may remain for a long time under the most skillful treatment. Also if psoriasis the same may be said with perhaps a still more unfavorable prognosis as to time. Now, on the other hand, if it is syphilis your local applications will be nearly useless, and you have a patient to treat by an exhibition of general specific remedies with no unfavorable prognosis and certainty that the patient will recover in far less time than if either of the others prevail. Now,. the objective signs in this case unfortunately do not point directly to the correct theory. Then we have intense itching which usually does not accompany psoriasis, and which, I am afraid, is supposed by most people to not accompany syphilis. The color here lends us no aid whatever. There are neither stains nor copper-colored spots upon the plantar surfaces. On close physical inspection of the patient with all his clothing removed there are neither stains, nor nodes, nor headache, nor baldness, nor throat trouble. The history of the case does not clear up the diagnosis well, for the reason that the patient himself, though a truthful man and desiring help and willing to tell all he knows, unfortunately must rely upon statements of men under whose care he has been. These persons, however competent, may differ in their definition of the word syphilis, and tell the patient that he either has or has not syphilis according to his own mental definition. All cases of eczema of the plantar and palmar surfaces are to be regarded with suspicion and the most thorough investigation made to see if, after all, the angry appearing eczema may be a syphilide. Now, as you are well aware, syphilis may assume the form of development of nearly every skin lesion, including epithelioma, and through the whole list of skin diseases there may run one common bond which leads us back to the disease called syphilis, whatever that bond may be. This leads me to say that while syphilis may lurk underneath almost every skin lesion, that you must avoid the falsity of finding syphilis where it is not. Many times syphilides are diagnosed to be malignant troubles, and conversely malignant troubles are diagnosed to be benign. I cannot lead you at this time into all the intricacies of differential diagnosis in diseases of the skin, but I will sum up for you this case, that, notwithstanding the intense itching and the absence of other general symptoms of specific poisoning, I diagnose this to be syphilis, and shall prescribe for this patient proto-iodide of mercury, ¼ grain after each meal. (Four weeks later the patient was presented with the skin trouble nearly gone.)

Now, I shall call your attention to the question of syphilis, and to show you some of the difficulties in mastering the study of syphilis as far as we understand it, I will reproduce a few definitions as they are given to us by syphilographers. Could we start with a correct and clear definition, our labor would be far less arduous than it is, and men who write on these

subjects would be far more likely to concur than they now do. In a very late work published in 1886, I find this definition—I might better say description, of a word not defined; even its etymology is questioned:

"Syphilis is a specific disease which may be acquired or inherited. It is inoculable to the sound solely by contact with the fluids of the diseased. A certain interval exists between the absorption of the poison and the manifestation of its effects. The poison is conveyed throughout the body by the blood. The effects of syphilis are displayed both on the surface of the body and internally. The natural course of the disease is to recovery."

You will notice in this definition that he closes with a statement which will not be satisfactory to all.

"Syphilis is an infectious, contagious and inoculable disease which first manifests itself by an indurated and infecting chancre, after ward by eruptions of the skin and mucous membranes, later by chronic inflammations of a cellulo-vascular tissue or bonds and finally by special productions in the form of some tumors or nodules, which have received the name of gummate." (Corneil.)

Another described veneral diseases, thus:

"Veneral diseases are three, syphilis, chancre and gonorrhœa.

Syphilis is a specifit disease acquired only by inheritance, or by direct contact of a surface capable of absorption with the poison secretions of a person already diseased. It is characterized by periods of eruption of varying severity and periods of repose of varying duration. The earlier symptoms are superficial, the later involve the viscera.

No organ in the body is exempt from paying tribute to the disease and the connective tissue suffers most. Treatment may shorten and modify the disease, time alone can work it out. A perfect recovery is possible." (Keyes.)

You will notice that the words contagion and infection are here used interchangeably, and of a certain poison. Now, what is that poison? On this answer hangs your theory of its pathology, and you may suppose that after dealing with this disease for hundreds of years, it having been observed by the best and the acutest minds in medicine and always drawing into its fascinating circle the most learned and wise physicians who have ever lived, that the pathology would long since have been discovered and clearly taught. Notwithstanding this, I ask you again, if there is a poison, what is that poison? How comes it that more persons are infected with syphilis than with any other disease? Why is it that its pathology which escapes the acutest minds and leaves us to grope our way in darkness for the most part treating syphilis? I ought scarcely to say groping, for in the world of medicine where specifics are rare, we here have a specific if any remedy may be called a specific. No matter by what empirical route our fathers have brought us to this knowledge, we have not been left the weapon by which we may beat back with success the ever varying tide of syphilis. You have it in mercury wisely administered. Some authors speak of this specific poison, simply by changing to latin, using the word virus. This contagion at some initial point, enters the circulation and by a kind of rebound produces the chancre and all the dire results which follow an inoculation, but the virus escapes our vision and is really only a figure of speech, and gives to the scientific man no clue as to the quality of the poison.

Again, other men tell us that syphilis is simply hyperplasia, that the introduction of a degraded cell by contact with the leucocytes prsduces the same result upon the neighboring leucocyte choking up the lymph spaces cutting off the nutrition causing the neuroses resulting in ulceration like this upon the feet of this patient.

If this be the true pathology of syphilis, we have a rational and clear reason for the exhibition of mercury, for it is well known that mercury causes the resolution of these degraded cells and this hyperplasia.

I have tried to use the case of this patient to make several valuable suggestions which may lead you to more closely study the differential diagnosis of syphilis, and I shall make this statement that while itching is generally absent in syphilis, that its presence does not justify you in saying the case is not syphilis. Second, I say further. to impress upon you the broad difference which exists not only in diagnosis and in treatment, but as regards the welfare of your patient in first determining whether any present skin disease is a general or a local lesion. I shall further give you three rules for the examination of patients consulting you for diseases of the skin:

First, never be content with examining the small and exposed portions of the skin displayed while the patient is clothed, but on the contrary examine the entire surface of the skin, and for this reason, if for no other, that there may exist at one and the same time in the same patient many different skin diseases either in the order of sequence or separate and distinct lesions.

Second, that you should examine your patients always by daylight, and secure for your offices the best lighted conditions possible for the reason that artificial light so varies the color of the skin lesion that you may be led into very serious mistakes. Indeed, you should refuse to give an opinion on any skin disease including the exanthemata, after sunset

Third. Be patient in making diagnosis for, while there is but little danger to life, every

person is very solicitous about an "eruption" of any kind.

PERITONITIS.*

BY H. H. MUDD, M. D., ST. LOUIS, MO.

The increased power conferred upon the surgeon by the developments resulting from Listerism, has wonderfully enlarged the sphere of his action. Indeed, so widely recognized is this power and so attractive the outlook, that nearly every physician has become a special surgeon, and to-day there is no specialty so neglected as that most valued and essential one of internal medicine. The science of surgery is being so rapidly advanced, and the changes are so radical, that it would be impossible to present to you those which commend themselves to an individual judgment. It would weary and but little profit you to listen to the long list of surgical procedures which are new, or are debatable ground. The seeming perfection of many of our operative procedures leaves apparently little to be desired. Yet so rapid are the genuine advances, that the text-books of the day are old on the morrow, and need revision before the printer's ink is dry on their pages. The medical mind of to day has broken away from the trammels of the dogmas, and the traditions of the past. Sometimes it finds sorrow and trouble in its wanderings, and returns to the principles recognized by the Fathers in Medicine. At other times we find much comfort and great congratulation in our new achievements.

The physiologist and experimentalist are now as fully appreciated by the surgeon as is the anatomist. The anatomist guides the hand, while the experimental physiologist tells of new regions to be explored, and new possibilities to be attained by the surgeon. The flood of light and the maze of facts presented to us by the physiologist, the pathologist, the experimentalist, and the practitioner, is so great that an active brain and an energetic body must be ever at work winnowing, assorting and arranging the facts and theories which guide the work of the day.

The shrewd guess and the daring operation of to-day is the science of the morrow.

The surgeon in entering hitherto unexplored regions demonstrates new physiological laws and makes possible more daring operations.

He garners from every field, and tests the knowledge thus obtained in the crucible of experience. The surgeon, then, must be a scientist, and it is a great comfort to every practitioner to recognize the fact that his work is becoming more precise. Diagnosis, prognosis, and therapeutics are each day becoming more accurate. In other words the opportunities for applied science are daily increasing. There is no problem more complicated or one that requires greater mental acumen, or more physical energy and endurance than the proper adjustment of the means to the end in the practice of medicine and surgery. The man who can accomplish this is as truly scientific as he who delves among the abstruse problems of astronomy or anthropology.

The recognition of disease and its treatment is part of our work, for its etiology is also sought in our appeal to the profession of the world through the Committee for the Collective Investigation of Disease. The Committee of the British Medical Association, through MR. HENRY BUTLIN, reports that, to use his own words: "I confess that when I first proposed the subject of inheritance of cancer, for collective investigation, it was with a very small belief in the reality of inheritance. I am forced to own that the mass of evidence that has been accumulated by the inquiry has led me to take a different view. Our returns show that there was a history of cancer in the direct line of descent in 20.60 per cent. of the cases, and if only the fathers and mothers of the cancerous patients are considered, that there was a percentage then of no less than 16.80." Again, to quote from the report, "The impression of PROF. HUMPHREY, that large eaters, and especially large meat eaters, are particularly liable to cancer, does not seem to be supported by the information obtained by this committee."

These and kindred subjects involve great knowledge and research, and vast as is the knowlege at command, and precise and exact as are many of our methods, it should be clearly recognized that all our surgical rules have their exceptions, and the surgeon is not a carpenter, who with his square and compass at hand works upon inert material which responds always and ever the same to the saw and file. The results in surgery are not always assured, even when the procedures are well considered. What wonder, then, that we, in our vain endeavor to harmonize development and life, with disease and decay find many mooted points for discussion?

It would be strange if workers so persistently engaged did not contribute to scientific facts to other departments of knowledge. Surgeons not content with applying knowledge gained from other fields, contribute through the perfection and the accuracy, and the thorough appreciation of every detail of their work, truly scientific facts to the sciences of biology, bacteriology, physiology, pathology, and even anatomy. Scientific practice stands as an entity, worthy of the devotion of the scientific mind.

Many surgical diseases which have long been with us receive routine treatment, which it is

*From paper read by title, at the 38th Annual Meeting of the American Medical Association

becoming evident is erroneous. So it is with some of the so-called advances of the year which must be accepted with a doubt and rejected after a trial. Individual judgment is all powerful with us yet, and practice is as varied as the surgeon and the patient.

Hence in stating my view to-day of points in practice, I shall no doubt clash with some of you. Let it not then be understood that, however earnest I may be in stating my convictions, I regard or ask you to accept as final, any expression of mine on matters of practice; and if I state too strongly any point, it is the earnestness of conviction, and not the dogmatism of intolerance that causes me to speak forcibly.

Patients and surgeons are not the same from day to day. It has been well said, "The privileges of a wise man, is to make mistakes—only fools are perfect (perfect fools)." The dull and stupid surgeon is the only one who is satisfied, and is surely right in following rules.

It is not to the rare and brilliant procedures of surgery to which I invite your attention; but rather to the common and frequent diseases.

PERITONITIS.

The subject of peritonitis with laparotomy, prophylactic or curative, is just now of vast importance. The magnitude of the subject and the mass of literature already accumulated preclude the possibility of fully considering the one, or of reviewing the other. Yet, I believe it will not be unprofitable to consider briefly what seems to be, in the absence of well-established rules, justifiable procedures in the treatment of peritonitis.

Laparotomy is urged for gun-shot wounds, stabs, contusions, ruptures and ulcerations, where it is supposed that visceral involvement has made possible the escape of fecal matter. The most difficult matter here to be considered is diagnosis. Are the diagnostic signs of such visceral effusion as may be expected to accompany shot wounds, stab or rupture promptly manifested and clear in their character? The shock of a penetrating wound varies not only with the amount of the injury inflicted, but with the individual and may delay distinct evidence of visceral injury until a peritonitis, fatal in the shock attending its onset. closes the scene. Positive signs of perforation will in many cases be absent, and we must make our operation one of exploration, or else await the development of the case. In the absence of clinical signs, positively indicating visceral lesion, must we promptly resort to exploratory laparotomy in all cases of gun-shot wounds?

I take the gun-shot wound as a typical one, apt to produce visceral lesion with effusion, and because there is greatest need for improvement in the therapeutic measures in this class of injuries. The answer to this question must be guarded, for a categorical one would but poorly express the sentiment of the profession of to-day. We must first exclude such cases as are accompanied by profound shock, evidenced by lowered temperature and loss of general vital power, since the minute examination of the abdominal viscera necessary to repair such injuries is likely to intensify the shock and hasten an unfavorable result. Again, it cannot be successfully denied that cases recover after visceral laceration by bullet wounds without operative interference. These recoveries are more apt to follow where the ball is small, and the intestinal canal is comparatively empty. The proportion of these spontaneous recoveries is as yet unknown; but they are, I believe, sufficient to justify non-interference in penetrating wounds inflicted with a small ball, where urgent symptoms due to the escape of visceral contents, are not present. There remain, then, for exploratory laparotomy, cases in which shock is not too great or where it is transient, and followed by pain, anxiety, tympanitis and other symptoms indicative of visceral injury. Theoretically, the exploratory operation is correct and should be applied to every case of bullet wound since perforation is expected in all; but in practice there are many obstacles, and it is questionable how great an improvement in results obtained will follow the enforcement of this therapeutic measure. The average result attending the expectant treatment is bad, yet it must be remembered that the injury is severe.

Laparotomy as a therapeutic measure is one about which surgeons are anxious, and which they guard with every precaution against untoward results, although laparotomy performed on an uninflamed peritoneum is not considered a dangerous operation, and is usually innocent of harm. In estimating the absolute need for operative interference it should be remembered that all perforating visceral wounds do not permit the escape of visceral contents into the peritoneal cavity, and that small quantities may be absorbed or encapsulated, and the consequent inflammation be limited and a cure established. On the other hand, it is known that an acupuncture may excite peritonitis, that a bullet wound is prone to ulcerate at its exposed surface, that a break or rupture in the peritoneal surface which communicates with a connective tissue space or a visceral cavity is a focus for a diffuse peritonitis, while a smooth well-approximated wound in which the peritoneal surfaces are in contact, readily heals.

If the severe shock of a great injury merges into a violent peritonitis or the milder cases where diagnostic signs have been absent develop a profuse inflammatory process, what are we to do? The peritonitis, diffuse and violent may develop without the escape of visceral contents, and the patient recover. Peritonitis

following the escape of the visceral contents is almost certainly fatal. A laparotomy performed in the presence of peritonitis is certainly injurious and without any benefit unless we can remove septic fluids, drain purulent pockets, repair leaking rents in the viscera, or cut off from the peritoneal cavity infecting pockets by approximating serous surfaces. Diagnosis is here again deficient, and we are unable to determine the necessity for operative interference; the operation is again exploratory, except where the septic serous effusion is large or the peritonitis is circumscribed and purulent pockets are perceptible. Here the demand is unequivocal and clear and is not to be ignored. The well-founded general laws of surgery give warrant for this laparotomy and no exceptions are admitted where the vitality of the patient is not exhausted and death imminent. General loss of vital power threatening death, or grave functional disturbance, or the known presence of visceral contents in the cavity are urgent demands for operative interference, notwithstanding the presence of peritonitis. The laparotomy will be curative in its influence if visceral lesions are repaired, antiseptic cleansing thoroughly established, and good drainage effected. If the peritonitis is slow in its development and the diagnosis is uncertain, there is a wide diversity of opinion as to the method to be pursued. Operative interference is pernicious, and a toilet of the peritoneum is of no avail as a therapeutic measure unless septic fluid is removed or lacerations repaired.

Surgeons of wide experience do not interfere as long as there is a possibility of a spontaneous cure; others advise the operation as soon as peritonitis is evident.

The difficulty with most surgeons will be in the fact, that it is impossible to determine that conditions are present which demand interference and which would be benefited by so grave an operation as abdominal section. I believe it to be safer to wait in the presence of peritonitis until definite indications are present to show fæcal extravasation, septic fluid, purulent collections, or a fatal tendency in the inflammatory process before resorting to a secondary operation. There is then no rigid rule to govern us in these cases. Each case is to be well considered and the result obtained, may neither uphold nor condemn the course pursued. Recovery follows desperate injuries and desperate remedies are legitimately applied to conditions of such grave prognosis.

It would be useless to quote the authorities, old and new, on this subject, since antiseptic surgery has revolutionized the entire subject of abdominal section. It is quite impossible in the time allowed now to analyze the subject or give reasons for the position here assumed. I believe, however, that immediate exploratory laparotomy offers the better field for operative work, and that it is justifiable where there is reason to think that visceral contents or a considerable amount of blood has escaped into the peritoneal cavity.

Laparotomy is not demanded in the presence of peritonitis except where septic fluid is abundant, a purulent collection is evident, a general loss of vital power threatens death, or where there is grave functional disturbance.

These deductions are not so radical as many would like but they are less conservative than many practice, and I believe they fairly represent the position of the profession on a mooted point, which only the recorded experience of years can definitely determine. They are the principles which would at present guide me in the management of such cases, and are the deductions made from a limited experience and the study of some of the recent literature bearing upon the subject.

ACTION OF MEDICINES ON THE HEART AND BLOOD-VESSELS.

BY J. A. MC DONELL, M. D., CHICAGO, ILL.

The materials at our disposal may be divided into three groups:

1. Medicines which act principally upon the heart.

2. Medicines which act principally upon the blood-vessel apparatus in such a manner as to preclude exact distinction as to which is the more affected, the heart or the blood-vessels.

A remedy may act on the heart:

(a) Directly;

(b) Indirectly, by directly stimulating the cardiac centre, in the medulla oblongata; and

(c) Reflexly, by a complete reflex circle through the same centre.

(a) The direct action of a remedy on the heart may be due to its action on

(1) The cardiac muscles;

(2) The intra-cardiac ganglia;

(3) On both at once.

First action:—(a) The energy of contraction is augmented, the number of pulsations remaining constant or diminished. An increase in dose is often followed by peristaltism. Finally the heart is arrested in systole.

Under the head of this action we may arrange what, in the strict sense of the word are called heart poisons: The glucoside of digitalis, nereium oleander, scilla, autiarius, poisonous tanghinia, strophantus hispidus, theretia ahouai, and nerifolia; the veratrium group, salts of bar, ium physostigma, camphor and guanidine. (The last three, however, do not arrest the heart in systole.) These substances seem to affect the automatic ganglia less than the cardiac muscles, and to produce contractions of the heart from base to apex (peristaltism) by changing muscular polarization.

Second action. 1st. (a) Diminution of contractile energy and enfeeblement of the cardiac muscle. Finally, cardiac paralysis with arrest in diastole.

Under this head are arranged the salts of copper and zinc, tartarized antimony and apomorphia.

(b) Here we have excitation of the intra-cardiac automatic sympathetic ganglia manifested by an augmentation of the force and frequency of contractions. An increase in dose produces contrary effects; the pulse falls, becomes feeble, the heart is arrested in diastole, the cardiac muscle narcotized, and the automatic centres paralyzed.

The remedies which produce such results are alcohol, cyanogen, chloral hydrate, ether, chloroform and anæsthetics in general. Perhaps we might also add the salts of potash and oxalic acid.

Vagus stimulation. (b1) If the inhibitory intra-cardiac ganglia be excited the heart is arrested in diastole. Musvein, pilocarpine, and nicotine may be placed in this list. Vagus stimulation may be neutralized by the vagi-paralyzers:—atropine, curavine, methyl-strychnine, conium, etc., and vice versa.

Action (c1) Here we have simultaneous action upon the cardiac muscles and intra-cardiac ganglia. With or without primordial acceleration there follows retardation of the heart peristaltism and diastolic arrest, with paralysis.

Here we group a number of alkaloids:—aconitine, delphinine and to a certain extent nicotine and phosphorus.

Action (b). The action is here what we have called indirect, and arises through stimulation of the centres of origin of the cardiac nerves. This stimulation causes vagus inhibition, and we need hardly say diastolic arrest. Hydrocyanic acid, nitrite of amyl, nitro glycerine and oxide of carbon appear to act primarily in this way. There is another question, however, which has not been resolved, namely: What medicines are capable of exciting or paralyzing the accelerator nerve centres? An experimental solution is difficult to attain, but we think that the central stimulation of those accelerators is the immediate cause of the excitation of the pulse produced by nitro-glycerine, nitrite of amyl, picrotoxine and cicotoxine.

Action (c). This action is completely reflex; inhibitory if the centrifugal impulse follows the vagus accelerator if on the sympathetic. Vagus inhibition may be produced by irritation of the terminal fibres of the trigemini; by inhalation of gases; by administration of impure chloroform; and through irritation of the gastro intestinal mucous membrane by corrosive substances. Up to the present time however, we know nothing of medicinal stimulants for accelerator reflex.

Medicines may act upon the blood vessels, directly, indirectly, or reflexly. As remedies which directly affect the muscular walls of the blood-vessels, we may mention vegetable and mineral astringents. Among those which act indirectly and raise arterial tension by stimulating the vaso-motor centres, the stimuli being carried on vaso-constrictor nerves to the blood-vessels, we place the salts of ammonium, barium and potassium, and such alkaloids as strychnine, picrotoxine, cicotoxine, delphinin and caffein. There is another group which equally stimulates the vaso-motor centres but which lowers arterial tension because the stimuli are carried to the vessels on vaso-dilator nerves. Here nitrite of amyl, nitro-glycerine, arsenious acid and the salts of gold and platinum find their spheres.

We have yet another class which acts indirectly by narcotizing the vaso-motor centres, thus lowering arterial tension through the absence of vaso-motor impulse. In this category are found the great number of anæsthetics, alcohol, hydrocyanic acid, aconite, etc. Under the head of remedies which act on the blood vessels by means of a reflex circle through the vaso-motor centres we may place rubefacients, epispastics, and certain purgatives. The primordial irritation caused by this class produces first a contraction and second a dilation of the vessels in the affected part.

The remaining class of remedies is gathered under the third head of our original division.

N. B. Authorities consulted: VELPEAU, CLAUDE BERNARD, B. SEQUARD, FOSTER, etc.

No. 473 Washington Boul.

Correspondence.

STIGMATA MAIDIS—EUPATORIUM PURPUREUM.

For several years past, I have been using the fluid extract of stigmata maidis in diseases of the kidney, bladder and urethra: in fact, the drug has a marked effect along the whole length of the urinary tract. In vesical tenesmus it seems, in my hands, to always fill the bill, and in acute cystitis there can be no doubt of its ameliorating effects. I have used it in renal colic in combination with eupatorium purpureum, or queen of the meadow, and acetate of potash. I have had several cases of renal colic of late years. Of course I usually administered a dose of morphine sulphate hypodermically, which is the thing in these cases, and then I would follow up with:

℞ Fl. ext. Stigmata of Maize, fl ℥ i.
Fl. ext. Queen of Meadow, fl ℥ iss.
Acetate potash, ℥ iii.
Sp. Juniper, q. s. ad. ℥ iv.

M. et. Sig. Teaspoonful at dose *pro re nata.*

I always get good results, and in most acute troubles, such as irritation of the neck of bladder, prostatitis, cystitis, or congestion of the kidneys, this remedy in my hands has produced excellent results.

The corn silk has such an action on the kidney itself, that it augments its secreting power, and has a tonic action on the secretory membranes. I have noticed where, on analysis, albumen has been found, and a great lack of solids, as shown by low specific gravity that under the use of the above prescription, the urea has increased and the albumen decreased. There can be no doubt that the drug is destined to hold an important place in the list of therapeutic agents.

The queen of the meadow is indicated in all cases where there is a degenerative process going on. It seems to aid nutrition in some way hardly explainable, but nevertheless easily proven by a clinical trial. I have always used Parke, Davis & Co.'s fluid extract when I had best results. In one case of acute cystitis in an old lady 69 years old, I prescribed the drug. The prescription was filled with an indifferent drug. It had no effect. I asked the attendant where the prescription was filled and he said at a certain store. I went there and found it was not P. D. & Co.'s make. I immediately got some of the "pure quill" and had the old lady take it. It relieved her after taking a few doses.

J. Z. Scott, M. D.

Scandia, Kansas.

A CHIEF CAUSE OF NON-SUCCESS.

Wonderful is the progress made in the practice of medicine at the present day. Never before in the annals of medical history has the medical profession co-operated in such praiseworthy and commendable harmony and unity as at the present period, each one being anxious and desirous of contributing his greater or less practical experience for the benefit of the profession in general, and the welfare of suffering humanity. And yet! many contributors and writers, either carelessly or unknowingly make, what may be actually termed a fatal mistake: they overlook and ignore one of the most, if not the most, essential part of their contribution, that part, on which depends the positive and indisputable proof of their success.

Physicians usually appear to think, if they mention the drugs and medicines, applications etc., used by them for certain diseased conditions, perhaps also giving the dose, that that is all-sufficient, and nothing further is required. One of the most important factors, however, to insure success, and a great contributing cause to a good result, is, how to take it, the particular form of combination, the actual dose, time and frequency. So is it of great importance to give a full and detailed account of special symptoms and phenomena, if any, differing in the slightest degree from those belonging to the disease proper. Much mischief, and even irreparable damage can be done by a lack of knowledge of the modus operandi of any drug or medicine used for some special disease.

My firm opinion is, that the negligence of many, in fact most physicians and writers, in paying attention to the above apparently unimportant points, is one of the chief causes of non-success and condemnation of what might otherwise prove a most valuable contribution to medicine. Even the order in which drugs and medicines are used in making up a prescription is in many cases of importance, as there may be, underlying the same, some perhaps unknown chemical action durthe process. Therefore let every physician not only be satisfied in writing an article on his personal experience, but let him be conscientious in doing so, as it is not only for the welfare of suffering humanity, but also a contributing element in sustaining his reputation as a reliable, thorough, and competent physician.

J. E. Hoffman, M. D.

Poughkeepsie, N. Y.

REPORT OF A CASE OF SEVERE PROSTATITIS.

Patient, a farmer, aged 62, has had prostatitis for several years, with aggravated attacks during the last three years, so that he was compelled to have his urine drawn, which was attended with very severe pain. He also had double orchitis, which was also very painful. This patient had been under varied treatment without receiving any permanent relief. Shortly after, my attention was called to the fluid extract pichi. I put the patient under its effects and gave him 15 drops every three hours for several days, or until the most aggravated symptoms yielded, after which I gave it to him three times a day, and continued its use for five to six weeks.

In five to six days he was very much improved and decidedly better. Continued the use of the pichi for 5 to 6 weeks with the following results, viz. Appetite very much improved, is much stronger, is gaining in flesh and has no pain from the use of the catheter, and the desire to urinate is much less frequent.

One peculiar feature about this case was that previous to the use of pichi this patient suffered from severe "bilious attacks" that came on every three weeks. Since using the pichi, he has had none and is feeling like a very different man.

There is no doubt in my mind that pichi is a valuable preparation and will fill a want that has been felt, to have a preparation that can be relied upon in bladder and urethral difficulties of inflammatory origin.

J. B Robinson, M. D.,

Mount Vernon, Iowa.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JULY 11, 1887.

Editorial.

CHOLERA INFANTUM.

With the thermometer in the nineties cholera infantum is the disease which will soon most engage the attention of the medical practitioner, and the mortality among "second summer" children will be great unless some plan of treatment not hitherto employed be resorted to. It is not a favorable comment on medicine that in spite of the united solicitude and research of the profession the summer mortality of infants remains out of proportion to that marking the remainder of the year. We have little or nothing to add at the opening of another season, in the way of suggestions as to the best methods of either preventing or curing the affection. There have been no developments since last year, except it be in the matter of the causative connection of tyrotoxicon with the disease. While the opinion that this poison is a very prolific cause has, as is generally the case with new views, received many adherents, the judgment which comes through sober second thought and careful investigation cannot yet be said to have been rendered.

In lieu of an article on this subject of our own preparing we present herewith extracts from a very interesting and comprehensive paper by Dr. James B. Baird which appears in the current number of the Atlanta Medical and Surgical Journal:

Properly, the term (cholera infantum) applies to cases of "acute gastro-intestinal catarrh in young children, characterized by large watery stools, profuse vomiting, high temperature, great prostration and rapid wasting." It has been proposed to include, however, all those affections of infants in the first or second year, especially at the time of dentition, occurring in towns, or populous rural districts, in hot weather, attended by vomiting during a portion, but not necessarily the whole course of the attack, with diarrhœa, acute or chronic, usually producing emaciation and threatening, if not actually causing, fatal debility.

Age, is an essential element in causation. The first half year is perhaps the most prolific of these derangements, and after two years they are comparatively rare. The "second summer" is probably most dreaded in popular estimation.

Heat has been mentioned as an active factor in the production of cholera infantum. The influence of a high atmospheric temperature may be excited directly upon the subject by lowering the tone of the system, by lessening the power of resistance and by exciting an increase of nervous irritability. We see the direct effects of heat in an extreme degree in cases of sunstroke; should we then not expect to find the sensitive organization of a delicate infant impressed by this agency when it is exposed to its influence? Heat may also act indirectly by calling into activity various terrene agencies which may serve to develop a latent predisposition or to increase the susceptibility to local irritants, as indigested food or impure water.

Food not adapted to the digestive capacity of the child is a palpable and an immediate cause of many and very severe attacks. In connection with age and heat, this is probably by far the most frequent exciting cause of these disorders.

Bad sanitary conditions and surroundings, as crowded habitations, defective ventilation, uncleanliness, contaminated water, an impure atmosphere, no out-of-door life, in short, the conditions that obtain in tenement houses in large cities, contribute to the predisposition as well as to the severity and fatality of diseases of this character.

The fact should be appreciated that a combination of several of these causes is usually necessary for the production of cholera infantum. They rarely operate singly. Moreover, the fact that these several causes attain greater activity during the period of dentition is due, beyond a doubt, in my mind, to the process of teething itself. It is true that this is a physiological process, but it may and often does develop pathological conditions. Besides the impress made on the nervous system, the gums may become red, hot and painful. The child is rendered irritable and fretful; sleep may be disturbed or broken and unrefreshing. We have a state akin to that produced by an abscess, inflamed hemorrhoids or acute tonsilitis. The reflex excitation is worthy of note. Let us remember the marvelous possibilities of these influences. The striking nervous phenomena associated with certain uterine or gastric disorders, or with urethral stricture, may serve as illustrations. I most decidedly do not concur in the opinion expressed by a recent writer* to the effect that "there is no ground for the belief that dentition is a factor in the causation,

* W. J. Conklin in the World's Reference Handbook of the Medical Sciences, Art. Cholera Infantum, Vol. III.

save that the great developmental and functional activity of the intestinal follicles during this period is a powerful predisposing cause to all kinds of intestinal derangement." Surely the relief which sometimes follows a simple incision of an inflamed gum may be admitted as evidence in estimating the influence of every one little tooth as the starting point of a long train of threatening symptoms. Nevertheless, it is unquestionably true that the imperfect development of the digestive organs at this time of life exposes them to serious disturbance in consequence of the ingestion of unphysiological and, for the child, indigestible food.

The onset of an attack may be sudden or it may occur intercurrently to mild diarrhœa. It is caused sometimes, under these circumstances, by a single dietary indiscretion. Frequent watery vomiting and purging constitute the prominent features of cholera infantum. If these symptoms persist, disorganization of the blood, speedy wasting and rapid exhaustion follow. Moderate fever of a remittent type is usually present. To the touch the surface may appear unnaturally cool, while the thermometer may at the same time indicate a temperature of 101 to 105 or even 108 degrees. The mouth is dry, the lips fissured, the features are pinched and withered. Some cases resemble closely the sporadic cholera of adults.

The duration of a severe attack may be from six to eight hours only to several days. In fatal cases collapse usually follows the violent symptoms in one to three days. If convalescence ensues the attack may eventuate in a chronic state marked by diarrhœa and occasional vomiting. On the other hand, if the progress is unfavorable, the urine is greatly diminished, as we should expect in view of the abundant watery discharges. It is sometimes suppressed. Drowsiness lapses into coma; convulsions frequently occur and death soon follows.

In the treatment of these disorders the question of food is of prime and insurmountable importance. Human milk is nature's food for infants. Upon their natural nourishment they thrive; deprived of it they languish and thousands die annually from this cause alone. When possible, then, the mother should nourish her child. There can be, I apprehend, no disputation on this point. If the supply of milk is deficient or defective, it may sometimes be increased and improved by a proper hygiene and diet on the part of the woman. It is extremely desirable to accomplish this result. If success in this direction should prove to be beyond reach, or if from debility, disease or the existence of some constitutional taint it is inexpedient for the mother to nurse her baby, a wet-nurse, if possible, should be secured. Sometimes, however, children will not take the breast of a strange woman, especially if they have been weaned and when they are sick. Hence we may be driven to the necessity of prescribing a substitute for human milk. What should this be? is the vital question. Undoubtedly the most available, and practically the best substitute, is cow's milk properly prepared. Milk of good quality is indispensable. It should be obtained from a cow in good order, suitably stabled and fed, and having calved within six months.* The feed of the cow should be restricted to bran, meal and hay, with an abundance of salt and of pure water. Quality, not quantity, is sought, for other management will cause a larger yield of milk. I have known children who could not digest the milk of Jersey cows, but who thrived on the milk of common stock belonging to the same herd. I do not offer any explanation of this fact. It seems, moreover, to be a rare exception to the rule.

[The difference in the proportion of casein, doubtless, affords the explanation.—Ed.]

The milk, carefully selected, should be methodically diluted to suit, not the age in months, but the development and digestive strength of the individual child. It should always be remembered that it is the food which is digested and appropriated which nourishes and sustains the body. This is not always in proportion to the amount ingested. The quantity taken into the stomach may, under certain circumstances, be large—excessive, yet literal starvation may ensue.

The following table will serve as an approximative guide to the requisite degree of dilution by measure—subject, of course, to the modification just referred to, namely, the development of the child and the state of its digestive organs:

First week, milk 1, water 3; first month, milk 1, water 2; third month, milk 1, water 1½; fifth month, milk 1, water 1; eighth month, milk 2, water 1½; twelfth to eighteenth month, milk 2, water 1.

It is not necessary or desirable to boil cow's milk; with proper care no objectionable changes in it need be feared. It has appeared to me that the minute coagula which cause the slight thickening of boiled milk must render it more difficult of digestion.

I have been favorably impressed by the proposition to peptonize the milk. By this process, the coagula, when the milk is taken into the stomach, are rendered more flocculent and less firm. Theoretically, the proposition is sound. As yet, my experience with it does not enable me to express a positive opinion as to its practical utility. If this "artificial digestion" should be carried too far, it imparts a bitter taste to the milk, which is, of course, offensive to the child.

* I am informed that in some parts of Europe cows are spayed for the purpose of improving the quality of the milk and of making the supply continuous.

In the selection of drugs appropriate to any case in which the above suggestions as to diet and hygiene do not suffice to secure relief, we must bear in mind that we may have to deal under this general term with sporadic cholera, diarrhœa from indigestion, enteritis, gastro-enteritis, entero-colitis, or colo-enteritis and dysentery. I shall ask you, gentlemen, in discussing the applicability of drugs, to bear this fact in mind, and to remember that a discriminating judgment must be exercised in selecting the most suitable remedies for a given case from those herein enumerated in order to best meet the indications presented by these several conditions. Among the digestive tonics pepsin and bismuth come, in my estimation, first. Let the quality of the pepsin be good, and give it in full doses. I prefer the pure—that is, not the saccharated pepsin. I am in the habit of ordering equal parts of pure non-hygroscopic pepsin, subnitrate of bismuth and white sugar, of each from one to three grains or more, according to age, to be taken dry on the tongue three or four times, or oftener, daily.

Opium is sometimes indispensable as a temporary assistant, though great circumspection should be observed in its use. It may be given as morphine, the deodorized tincture or paregoric. The hypodermic use of drugs is not free from danger in infants. The risk of tetanus should not be overlooked. I infinitely prefer suppositories or rectal injections. Suppositories of opium, or of the watery extract, may be combined with extract of belladonna or extract of hyoscyamus and acetate of lead. Laudanum injections are a valuable resource. To these may be added, if deemed advisable, sulphate of copper, acetate of lead and nitrate of silver. If the latter drug is employed the injection should be preceded by bathing the anus and adjacent portion of the rectum with salt water to avoid distressing tenesmus, which is liable to produce. DOVER'S powder is an eligible form for the exihibition of opium.

One or two drops of the deodorized tincture of opium on a lump of sugar have often proved, in my hands, a convenient mode of administration. Tincture of opium may be combined with tincture of krameria and chalk mixture—the elixir of orange being an elegant vehicle. Perhaps some of the natural mineral waters may prove, in exceptional cases, available. Chloral, to procure sleep and to calm nervous excitement, is a valuable remedy. A dose of castor oil, or possibly small doses of calomel, are indicated in some cases. The latter may be combined with Dover's powder, not for its purgative effect, but to improve the secretions. This, gentlemen, may sound like old-time doctrine, but it has a practical meaning. I sometimes fear that we go too fast; that in our eager haste to find and to follow something new we surrender the substance for the shadow, and that in our headlong pursuit of scientific theories we sadly miss some of the substantial results achieved by our venerated fathers in medicine, guided as they were by their hard common sense.

Aromatic sulphuric acid, muriatic acid, carbonate of ammonia, chloroform, hydrocyanic acid, camphor, Fowler's solution, tincture of nux vomica in small doses, and carbolic acid, all enjoy certain repute, and are confidently indorsed by respectable authorities. Creosote, in one-eigth to one-sixth drop doses in mucilage, after vomiting, is said to exert sometimes a magical influence. Quinine, of course—quinine heroically, to reduce the temperature and to kill the terrible germs, the bacilli that are supposed to swarm in the blood of every one who has an ailment, from a corn on his toe to a cancer on his nose. I do not approve of this abuse of a valuable remedy. Brandy is very important, not only to sustain strength for the moment, but to ward off asthenia. We must at times foresee this evil and prepare to meet it. I have not formed a favorable opinion of port wine, and I think the wine of pepsin an illogical preparation. I never prescribe it.

Externally counter-irritation, with mustard, turpentine, spiced poultices, camphorated oil and hot cloths, fulfill clearly-defined indications.

Now, while I have given a long list of so-called remedies, let me earnestly counsel you not to be officious in the use of drugs. Reliance upon them sometimes contributes to your defeat in those cases, and they are legion, where indigestion is the prime underlying vice. Look to the cause of the attack and seek to correct it. Avoid complicated prescriptions. Eschew highly-flavored and syrupy compounds. Strive to do no harm, even if you fail to do good. Let your zeal be tempered with prudence, and, as the fatal season is at hand, may you be prospered in your work.

DISEASES OF THE RECTUM.

During the last few years the attention of the profession has been closely drawn to the diseases of the rectum. The reasons for it are two, viz.: A remarkable increase of quackery devoted to the rectum; and a few short, sharp essays by learned and experienced practitioners of surgery.

Newspapers teem and have teemed with accounts and advertisements of the marvelous cures effected by means of this or that system of rectal treatment. In fact the quacks and the lay press are to blame for mostly all that has appeared before the public in connection with diseases of the rectum. The result of this has been to awaken in the profession a determined effort to do more than has heretofore been done to cure these diseases. The practi-

tioner of ten years ago had no adequate idea of the great frequency of rectal ailments, and it is with difficulty that he has been induced to lay aside his prejudices, and purchase the necessary speculum, probes, hook, needles and syringe for the treatment of these complaints. But to-day no man who assumes to be decently posted in the progress of medical science is making, dares to omit the rectum when gathering in the several factors which make up the sum of his patient's ill-health. That organ is rapidly becoming to the general practitioner what the uterus was to the gynæcologist for so many years—an abiding place or point of origin for a great many reflex disturbances. With the proper speculum properly applied and a blunt hook, the operator reaches into the rectum of his patient. If, on drawing the hook toward him, it catches in a fold or pouch of the rectum, a pus pocket is alleged to be discovered, and is removed with the scissors. The patient after that is alleged to be cured of his reflex disturbances, and progresses on the high road to health and happiness. The pathologist finds in these cases an opportunity for the scientific use of his imagination, which he has not been too modest to embrace. He has taken a look at the rich plexus of hemorrhoidal nerves; has noted its relation, in the plates at least, to the sympathetic and cerebro-spinal systems. The automatic action of the anus and lower bowel has been carefully studied, and its dependence on a reflex excito-motor centre in the spinal cord duly appreciated. The microscope has revealed the termini of these various nerves in intimate association with the epithelium of the retum. The blood-vessels of the region are found dilated, tortuous, interfering with the nutrition and growth of the epithelium. In short, all the elements are present on which to found, providing you can find a local lesion, a rational history of disturbance of general health, or a special disturbance of the nervous system in the form of reflex neuralgias. One man will have his lumbago; another, his pain in the top is his head, and yet another be cured of his vertigo and muscular asthenopia by having little snips of mucous membrane cut from his rectum. These little snips of membrane will be found to be the seat of disease; the epithelium softened and infiltrated with white blood corpuscles; the end organs of nerves in direct communication with the spinal cord and sympathetic ganglia are eroded and irritated by the presence and movements of fœcal masses and gases, until they are pulled down with the blunt hook and excised with the scissors. All the mysterious phenomena said to be induced by physical changes in the uterus and ovaries and bladder, may be induced, it is claimed by rectal enthusiasts, by lesions of the rectum and anus. The ill health accompanying these mysterious phenomena are cured by rectal packing and snipping just as often as the uterine cases are cured by caustic, dilation or trachelorraphy. The rectum has hosts of Emmets and not a few Bennetts and Simpsons. More are coming, and with them more help, we hope, for humanity afflicted with piles, fistulas, fissures, etc.

Notes.

The papers are detailing the ailments of which some distinguished men are suffering. For instance, the EMPEROR WILLIAM is suffering from advancing years, the Crown Prince from laryngeal papilloma, and BISMARCK from rheumatism. MR. GLADSTONE has catarrhal trouble of his respiratory organs; SIR MICHAEL HICKS BEACH has cataracts; MR. PARNELL has some unknown trouble which makes him an invalid; LORD RANDOLPH CHURCHILL is married to an American lady and has contracted the American disease, neurasthenia. MR. BLAINE is reported to be suffering from Bright's disease; MR. MANNING is hemiplegic; PRESIDENT CLEVELAND is rheumatic and lipomatosic; The Emperor of Russia is suffering from mental depression. Following this long list comes the announcement that MR. MIKE KELLY of Boston, and MR. NED HANLON of Detroit, are suffering from the "Charlie horse," a peculiar contraction of the muscles of the thigh which attacks base-ball players. MR. CHARLES BENNETT has been unable to catch more than two or three games since the season opened, owing to a lame shoulder. It gives us pleasure, however, that GETZIEN the pretzel curver, is again able to take his position in the box, and we hope to hear of equally satisfactory improvement in the condition of the other notables.

DR. MOXON: The physician cannot classify diseases, because what he knows of them is not comparable knowledge. For while one disease is pain in the leg, and another a growth in the stomach, and another a spider in the skin, the classification of them is worse than mixing incompatibles—it is mixing things indifferent. It is like trying to mix the solar spectrum and the key of C major with the essence of peppermint.

"Without the doses three times a day, the service would not go on; they unite the attention of doctor, patient, nurse and friend in a periodic series of efforts, something not unlike those little yells a group of sailors make in turn when they are hauling hard on a cable, without which it appears the cable would never come along, although there is no apparent force in the noises they make. A doctor without physic is like a priest without a creed or a poet without a rhyme."

Attention is being called to the large proportion of illegitimate births in certain European countries. In Austria over one-half of the births are illegitimate; in France the proportion to legitimate births is 1 to 12, although in Paris the proportion is much higher, 1 to 3; in Great Britain it is 1 to 15, and all over Europe the number of children born out of wedlock is said to be inreasing. Certainly no such proportion as any of the above obtains in this country, and it is held that the fact argues either that female virtue is more robust here, that the American woman is better versed in "tricks," or that the abortionist is more prevalent. We believe that all of these are operative, but that the better showing is due principally to the first.

The ways of the Orient are slowly, but surely permeating the Occident, and, doubtless, not many generations will have gone to slumber with their fathers before the despised Mongolian will be cutting a very important figure in this country. The latest Eastern practice which has been introduced is that of having a blind man to make the digital examinations in a gynæcologist's office. A Chicago gynæcologist is the innovator. This is in imitation of the Japanese who are said to employ blind men to do the massage act. Besides being unable to shock the modesty of the female through his sight of her, the blind man's sense of touch is very delicate.

The attempt to legislate the profession of this State up to the requirements implied by the assumption of the title of "doctor," has once more met with failure. The bill "died a bornin'." It passed through the House of Representatives all right, but the strait in the Senate was too contracted, and it was strangled. For another two years, therefore, the profession will be obliged to be like a tub and stand on its own bottom. We are not disposed to repine at the fate of the bill. It would, possibly, have been productive of some good, but it was quite too latitudinarian for the demand of the times. Let us have a thorough reform or none at all.

The Practitioner refers to an epidemic of exudative amygdalitis in which eighty cases occurred, the cause being traceable to defective drainage. There was high fever (105° F.), and the patch attacked one or both tonsils. The fact that there were no paralytic sequelæ, no loss of reflexes, no albuminuria and no glandular enlargement, causes it to exclude diphtheria, in its diagnosis, and the affection is set down as "exudative amygdalitis." Such particularity in diagnosis would do more than all the efforts of our health office to banish diphtheria from our city.

The fifth meeting of the Mississippi Valley Medical Association occurs at Crab Orchard Springs, Ky., on the 13th inst., and will continue in session three days. It promises to be the most successful in the history of the Association. Dr. I. N. Love, of the Weekly Medical Review, St. Louis, is President, and this fact alone ensures a time of good fellowship, while the promise of papers is large. We should have been delighted to accept a cordial invitation to be present, but the exigencies prevent.

The profession of Germany have taken steps towards the correction of an evil from which the profession of this country has commenced to suffer. Circulars have been addressed by the Association of German Physicians to the Directors of all the gymnasia of Germany, asking them to dissuade students from adopting the medical profession. The circular is accompanied by statistics showing the proportion between the number of physicians licensed each year and the number who die or retire from the profession.

The Savannah (Ga.) News gives the history of six young men whose course it has followed since the war, and who adopted various life occupations. It is very interesting, but we have only space for the moral which it conveys: The story of these young men teaches a lesson. The professions of law and medicine in Georgia are so crowded that only a few can make reputations and money in them. The man, however, whose mind and hands are educated can hardly fail to take a high position and gain a competency, if not a fortune.

Dr. W. B. Parks, of Atlanta, Ga., concludes an article on alcohol-poisoning as follows: You may organize the world into temperance societies; you may send up petitions from every State in the Union to the legislatures, praying to regulate the indiscriminate sale of spirituous liquors; you may tell and show the poor inebriate that he is on the brink of the drunkard's grave, yet if you do not relieve his anæmic brain, if you do not cure the disease set up in the brain by this poisonous agent, he will cry, "Give me drink, or I die!"

The thermometer in this city during the past week has been almost constantly in the nineties. The effect of such weather is to lower very much one's stock of stamina, and, probably none feel the depression more than he who undertakes to do anything in the line of literary work. The readers of medical journals have learned to be charitable, the cultivation of this virtue being, indeed, a part of their calling, and the allowances which they make for the editor's derilections at this season of the year are always sufficient unto the occasion.

The Western Druggist states that two plugs of tobacco placed in a jug of whiskey by a

small boy, caused 15 cases of tyrotoxicon ice-cream poisoning at a recent festival, and to still further emphasize the poisonous properties of the weed, the Western Medical Review mentions the fact that a wild cat which was shot with a bullet made from plug tobacco died shortly after. Lead has also been known to be exceedingly poisonous when similarly applied.

Charity Hospital, New York, is about to supply a long-felt want. It has taken steps towards the establishment of a training-school for male nurses. The course of study announced is such as is calculated "to make men careful and docile nurses, rather than pretentious and ambitious supplementary advisers." If such a course could but be introduced into many of our medical colleges, the benefits would be multiplied many fold.

Dujardin-Beaumetz on morphine: The older I grow the more chary I become in the use of morphine, for despite the marvelous properties of this alkaloid, which is by far the most active of analgesics, its dangers and disadvantages are such that I reserve its employment for exceptional cases.

A country hotel-keeper, who advertises for summer boarders, was surprised at receiving from a gentleman in the city a request for a sample of his water (drinking water) for analysis. This is but a foreshadowing of the practical application of sanitary science in the not very remote future.

Will some reader who may know, please inform us as to the nature of the "Charlie horse," which the Associated Press despatches tell us is disabling a number of the athletes who are administering to the amusement of the public in the capacity of base-ball players?

It must be the warm weather. One contemporary has an article on Buttermilk for Children, and another, in commenting thereon, gravely remarks that if the child's mother is healthy it will require nothing but her milk.

Therapeutic Brevities.

DIARRHŒA OF CHILDREN. — SENSEMANN recommends the subnitrate of bismuth, gr. iij–vj hourly, as almost a specific. ROSSBACH praises naphthalin, though not wholly free from irritating effects upon the kidneys and bladder. It is best given in doses of gr. ½–ij–xv several times daily, in keratin or gelatin-coated pills. SANSOM gives calcium sulphocarbolate for infantile diarrhœa. On account of its ready solubility it is the best of chalk preparations. Ten parts contain 1.8 parts of calcium. STEPHENSON recommends phosphate of sodium in small doses for diarrhœa infantum, and in chronic catarrh of the small intestines and dyspepsia of children, MAYR uses pasta guarana (guarana uva) as an astringent, in doses of gr. v–x–xx with sugar three times daily. A widely used remedy in diarrhœa infantum is cornu cervi raspatum as a decoction.

℞ Cornu cervi rasp., ʒ xiij.
Ext. glycyrrhizæ, ʒ ijss.
Cort. cinnam. cass., ʒ ss.
M.—Make into a tea.

Another remedy well recommended is cascarilla bark; take ℈iv; macerate for half an hour in ʒ xx hot water, filter and add cinnamon syrup ʒ v. Sig.—A teaspoonful every hour.

WENDT gives the following for chronic diarrhœa infantum:

℞ Extr. calumbæ, ʒ j.
Decoct. salep., ℥ iijss.
Elæo sacch.* fœniculi., ʒ iv.
M. Sig.—One teaspoonful hourly (*to be shaken*).

For gastric and intestinal catarrh of children a safe prescription is:

℞ Hydrarg. chlor. mite, gr. ⅙.
Pulv. gummos., gr. vijss.
M.—Make into 10 powders. Sig.—One every three hours.

For the same with green-colored stools:

℞ Hydrarg. chlor. mite., gr. ¼.
Pulv. rad. rhei., gr. ½.
Conch. præp., gr. ivss.
M.—Make into eight powders. Sig.—One powder three or four times daily.

LEBERT advises logwood, ʒ i boiled in water ℥ iv and strained. To this add ʒ vijss of simple syrup. Sig.—A teaspoonful hourly.

For diarrhœa of children with acid stomach is recommended:

℞ Sodii bicarb., gr. xv.
Mucilag. gummi arab., ℥ iv.
Tinct. rhei. aquos., ʒ ss.
Syr. aurant. cort., ʒ vijss.
M. Sig.—A teaspoonful every one or two hours.

For weakness of digestion and asthenic diarrhœa WENDT gives:

℞ Rhizom. calami., ʒ ss.
In aqua ferv. q. s. and filter; add:
Gummi arab., ʒ j.
Sacchari., ʒ ij.
M. Sig.—A teaspoonful every two hours.

*An intimate combination of ethereal oil and sugar, gtt j to ʒ ss. Used when the oil is to be added to a liquid; to disguise an unpleasant taste; adjuvant to powders; and lastly as a vehicle of the ethereal oil itself. Frequently used by the Germans.

Ipecacuanha root is recommended by GUÉPEAN DE MUSSY in diarrhœa infantum.

The following formulæ are largely used in the early stages of the summer diarrhœa of children.

℞ Tinct. opii deodorat., ♏xvi
Bismuth. subnitrat., ʒ ij
Syrupi, ʒ ij
Misturæ cretæ, ʒ xiv.

M. Sig. Shake: One teaspoonful every two to four hours.

Bismuth. subnitrat., ʒ ij
Pulv. ipecac. comp., gr. ix

M. Make it into twelve powders. Sig. One powder every three hours.

For cholera infantum the following is serviceable.

℞ Tinct. opii deodorat., ♏xvi.
Spts. ammmon. aromat., ʒ j
Bismuth. subnitrat., ʒ ij
Syrupi, ℥ ss.
Misturæ cretæ, ℥ iss.

M. Sig. One teaspoonful every two or three hours.*

For the more chronic cases of these complaints muriatic acid and pepsin saccharat. may with advantage be substituted for the chalk.

Money advises the following:

℞ Bismuth. subnitr., gr. iv.
Sodæ bicarb. gr. iv.
Pulv. tragac. co., gr. iij
Spt. chlorof., ♏ij
Aq. carui., ʒ ij t. d. s.

When improvement has set in, and so succeed the other agents, Goodhart recommends:

℞ Liquor ferri. nitratis.
Acidi nitrici dil ää ʒ ss
Syrupi zingiberis, ℥ j
Aquam, q.s. ad ℥ iij.

M. Sig. One teaspoonful three times daily, for a child of two years.

Conby, of Paris, describes the symptomatology and etiology of this affection, stating that, in Paris, the mortality from this disease during the summer is 600 per month. He advises the use of dietetic measures, the subnitrate of bismuth and laudanum. In the severer cases the writer recommends the following prescriptions which we quote from the Medical News, June 25th, 1887:

Aquæ destillat, ʒ 12½
Syrup lydon, ʒ 5
Acid hydrochloric. dil., ♏ 8.

M. Sig. Teaspoonful two hours.

Sacch. pulver, ʒ 2½
Naphthalin, gr. 15
Iodoform, gr. 3
Ol. bergamot, gtt. 2.

M. Ft. in chart. 20 in num.

Sig. One powder every hour, in milk.

Naphthalin, gr. 8
Spirit. vini gallici, ʒ 12½.

M. Sig. To be taken during twenty-four hours, in teaspoonful or coffee-spoonful doses. —*Med. and Surg. Reporter.*

FOR THE GREEN DIARRHŒA OF INFANTS.—

℞ Lactic acid, ♁ij,
Syrup,
Water, of each, ℥ ij.

♏ Sig. A teaspoonful after each stool.

This has been recently recommended, but lacks the testimony of sufficient experience to give it a fixed place as a remedy of superior value.

FRECKLE CURES.—The National Druggist gives the following formulæ, which are very seasonable.

Powdered saltpetre applied to the freckles by the finger moistened with water and dipped in the powder. Said to be effective when perfectly done and judiciously repeated.

Take of
Lemon juice, 1 fl. oz.
Powdered borax, 30 grs.
Granulated sugar, 1 troy dr.

Put in a 2-ounce bottle and macerate for a week, with frequent agitation.

Apply a small quantity to the freckles at night.

Take of
Corrosive sublimate, 6 grs.
Diluted hydrochloric acid, 1 fl. dr.
Water, 4 fl. ozs.
Alcohol, 2 fl. ozs.
Glycerin, 1 fl. oz.

Mix.

Apply at night and wash from the skin with soap in the morning.

Take of
Sulpho-carbolate of zinc, 2 parts,
Glycerin, 25 parts,
Rose water, 25 parts,
Perfumed Alcohol, 5 parts.

Mix.

Apply twice daily for from half an hour to an hour, and then wash off with cold water.

CONVENIENT FORMULÆ FOR THE USE OF BALSAM OF COPAIBA.—For internal use:

* An infant of six months can take one-half the dose of the last the three formulæ above given, and one of three months, one third of the dose.

℞ Balsam copaivæ, 2 parts.
Spirit. juniperi, 3 parts.
Spirit. ætheris nitrosi, 1 part.

M. Sig. 30 drops 4 times daily.—SCHŒMANN.

An emulsion for topical use, by injection.

℞ Balsam copaivæ, 4 parts.
Sodii carb. cryst., 2 parts.
Aquam, q. s. ad. 100 parts.

M. Sig. For injection.

This emulsion was originally a French prescription, but being a convenient and permanent emulsion has been widely used. It is commonly diluted with three parts water, when an intravesical injection is made; when excessive pain is present, a few drops of tincture of opium may be added.—JEANNEL.

℞ Balsam copaivæ,
Extr. cubebæ, āā ʒ 2½.
Cubebæ pulv.,
Myrrh. pulv., āā q. s.

Ft. pil. 50 in num. Coat with gelatin.
Sig. Two or three pills several times daily.

Medical Progress.

ON A SPEEDY AND SOMETIMES SUCCESSFUL METHOD OF TREATING HAY FEVER.—The eminent English physician, SIR ANDREW CLARK, M. D., F. R. S., in an article on this topic appearing in the British Medical Journal, June 11, 1887, discusses the treatment of this distressing malady asfollows:

Theoretically the objects to be achieved by treatment are—the soothing and strengthening of the general nervous system, the allaying of local irritability, and the removal of the exciting cause.

To remove the exciting cause, or rather, speaking correctly, to remove the susceptible person from it, is to prevent the oncoming of the disease, and if you send him to sea or to the summit of some Alpine height, you will assuredly succeed. There are, however, many who cannot follow this counsel, and who must remain under the influence of the exciting cause of the malady. What can be done for the patient in such circumstances? We may strive to strengthen by tonics the weak and irritable nervous constitution, and MOREL MACKENZIE has had some success with valerianate of zinc and asafœtida, whilst BLACKLEY has failed with every drug which he has tried. By common confession general treatment, although not useless, is never by itself successful.

We are therefore compelled to turn to the study of local treatment as the chief mode of relieving or curing this disease. There are three plans of local treatment:

The first plan is to allay the irritability of the nasal mucous membranes.

The second plan is to exhaust the irritability of the nasal mucous membrane.

The third plan is to remove or to modify, or to destroy by caustic, or by cautery, galvanic or igneous, such portions of the nasal mucous membrane as are found; or are believed to be, the seat of the pathogenic irritability. This third and most radical plan of treatment is practiced for the most part, I believe, in America, and in the hands of DALY, of Pittsburg, ROE, of Rochester, and MACKENZIE, of Baltimore, it has been followed by lasting and signal success. But as there are not as yet at our disposal materials sufficient to form a critical estimate of the relative value of this mode of treatment, as I have myself no personal experience of the practice of it, and as in this imperfect lecture my chief object is to submit to your consideration the plan of treatment designed and practiced by myself, I dismiss for the present from further consideration all operative procedures of this radical kind.

The first plan of treatment proposes to prevent or to cure hay-fever by allaying the pathogenic irritability of the mucous membrane. This was the object which I endeavored to achieve when I began my therapeutical experiments in the treatment of this disease. From trials extending over several years, no remedies of this sort, except aconitine or atropine, returned me any results of the smallest value, and the results returned by the use of these alkaloids were so insignificant, and effects following it were sometimes so disagreeable, that I abandoned my inquiries in this direction. The introduction of cocaine, however, and its recent employment in the treatment of hay-fever, induced me to reopen my experiments in this direction. At first my success was considerable, for three out of five cases were immediately relieved, and the relief was maintained by the frequent renewal of the application of the cocaine to the nasal mucous membrane. But when, last year, my experience of the use of this drug somewhat increased, my success in using it diminished. In one case the application failed and disagreed; in another case it neither disagreed nor failed; but I was quite unable to discover in the patients the grounds of this difference of action. Nevertheless, although it appears to me that the success of cocaine as a local remedy in hay-fever has been over-rated, although the necessity of frequent application is troublesome, and although its use is not free from inconveniences which might eventually prove something worse, I am of opinion that its success and its comparative freedom from injurious consequences are sufficient to justify, with careful watching, a longer and larger trial.

There are three ways of using cocaine in the local treatment of hay fever; it may be used in the form of a solution, of a spray, or of a nasal bougie. Personally, I prefer to use a solution varying in strength from 5 to 15 per cent., and I apply it to the interior of the nose and the back of the soft palate by means of a large camel-hair pencil attached to an aluminium shank, and bent at an appropriate angle. For use in the form of nasal bougies, from a quarter of a grain or more of the hydrochlorate of cocaine is dissolved in a mixture of gelatin and glycerin, and made of different weights and shapes, according to the peculiarities of the case to which they are to be employed. For using cocaine in the form of spray, some efficient and ingenious spray-producers have been invented. Many of them have been furnished with nozzles so constructed that the spray can

be applied directly to almost any part of the nasal and pharyngeal cavities. These spray-producers, with weak cocaine solutions, are sometimes very useful in allaying the small but still troublesome irritation which, in the intervals of the hay-fever paroxysms, is apt to arise in the ears, eyes, and mouth. By the great kindness of MR. MARTINDALE, to whose pains, intelligence, and accuracy in matters of this kind we are all so much indebted, I am enabled to show you all these preparations of cocaine, and all the instruments wherewith they are used.

I come now to consider the second plan proposed for the local treatment of hay-fever. The object of this plan, which includes constitutional treatment, is to subdue the irritability of the nasal mucous membrane to such an extent that it shall no longer react to special or common irritants, whether pollen or dust, in a pathogenic manner. In the first place the patient is put upon such a regimen as will conduce most to the improvement of his general health. He is instructed to have a simple but liberal dietary, to be extremely moderate in the use of alcoholic stimulants, to have daily exercise, to follow early hours, and to continue, if that be possible, even at the cost of suffering, his ordinary occupations. If the patient is very weak, he is instructed to take with his meals drachm doses of Easton's syrup, with three or more drops of the solution of hydrochloride of arsenic. If he is nervous as well as weak, I prescribe for him in their full respective doses, tartarized iron, ammonium bromide, tincture of nux vomica, and solution of arseniate of soda. In some cases I think that I have seen great benefit follow the use, thrice a day, of five grains of sulphate of quinine dissolved in citric acid, and given in effervescence with carbonate of ammonia. For the strictly local treatment, there are required a common laryngeal brush and a carbolic mixture. This mixture is composed of glycerin of carbolic acid one ounce, hydrochlorate of quinine one drachm, and a two-thousandth part of perchlorate mercury. Heat will be required in order to dissolve the whole of the quinine; without heat MR. MARTINDALE informs me that the glycerin of carbolic acid will dissolve only one half the quantity prescribed.

Let me now describe the method of procedure to be followed in applying the carbolic acid mixture to the mucous membrane of the nasal cavities. If there is much mucous in the nostrils, cleanse them by means of a douche of warm water containing boro-glyceride* in the proportion of an ounce to the pint. Dip the laryngeal brush in the carbolic acid mixture, and see that the brush is full but not overflowing. Place the left hand on the left side of the forehead, and the thumb on the tip of the nose, with the shank of the brush between the thumb and two forefingers of the right hand, and the brush itself directed upwards, push it gently but firmly into one of the nostrils, carry it as high as you can without inflicting injury, move it about so as to bring the mixture in contact as much as possible with the interior of the upper part of the nostril, and then withdraw it. With another brush filled with the carbolic acid mixture, or with the same brush washed, dried, and replenished, you complete in the manner following the two operations required for each nostril. Having the left hand in the position already described, and the right hand holding the laryngeal brush with the hair pencil directed forwards from the body of the operator, push the brush along the floor of the nostril into the pharynx, and after ensuring free contact with the adjacent parts withdraw it. If during this operation the brush is overfull, some of the carbolic mixture will fall into the throat and excite coughing or some other discomfort. When you have thus finished the treatment of one nostril, and carefully removed any of the carbolic acid mixture which may have been spilt upon the nose or lips, you will proceed to treat the second nostril in exactly the same manner as you have dealt with the first.

During the performance of these manœuvres great assistance will be obtained from the left hand of the operator being placed over the left side of the face and forehead of the patient. With this hand the operator can adjust the patient's head to the various movements of the laryngeal brush, and with the thumb of the same hand placed on the tip of the patient's nose, the opening of the nostril can be adjusted to a convenient size and shape. When the local effects of a paroxysm are severe, and have extended to the back part of the soft palate, it will be desirable to introduce through the mouth into the pharynx the laryngeal brush, moderately filled with the carbolic acid mixture, and there, by a manœuvre easily acquired and practiced, to brush the posterior surface of the soft palate and the adjacent parts.

The immediate effects of these manœuvres differ in different persons and in the same person at different times. In all cases the effects are more or less disagreeable, and last from half an hour to half a day. Sometimes a little blood-stained mucus is discharged from the nose and throat, and sometimes there is a slight frontal headache, sometimes there is a trivial cough, and occasionally you will have developed all the local phenomena of a paroxysm of hay-fever.

When advising a patient with hay-fever to submit to this plan of treatment for its relief, I have found it expedient to warn him beforehand of the disagreeable effects which sometimes follow the application of the carbolic mixture, and to assure him that they are both brief in duration and devoid of danger. When this warning is withheld, some patients will grossly exaggerate their sufferings, ascribe all sorts of injurious consequences to the application, and cover the physician with undeserved reproaches. Sometimes a single application of the carbolic acid mixture is sufficient to prevent for a whole season the return of the hay-fever paroxysm, and four times within my own knowledge it has never reappeared. Usually two or three applications are necessary to insure a full chance of success. The length of the interval between the applications must be determined by the character of the immediate effects. If these are mild, the applications may be renewed on alternate days; but if severe, at least three days should elapse between succeeding applications.

Of the measure of success which has followed this treatment of hay-fever, now practiced over twenty years, I am unable to speak with exacti-

*Before the introduction of boro-glyceride, I employed a 5-grain solution of chlorate of potash, which was less efficient.

tude. Patients when relieved seldom, and when unrelieved never, return to record their experiences, and I have been unable to get at the subsequent histories of more than a third of the number of persons whom I have treated. It is, however, my conviction that of this roughly estimated third whose cases I have been able to follow, a half has been cured for the season and four persons have been cured "for good." This you will say justly is not a success of which to boast. Quite so. But if you will compare the results of this treatment with the results of every other treatment, not excepting the cocaine treatment, which is its closest rival, you will have to confess that, however small may be the measure of success, it is not one which you can afford to despise. At any rate a communication of this kind is entitled to your indulgence, inasmuch as it is an honest, although very humble, endeavor to press pathology into practice and to take away the reproach which has been cast upon us of ignoring or of repudiating the natural and just alliance which should unite in closest relationships the science with the art of medicine.

LOCAL TREATMENT OF SCROFULOUS GLANDS, WITH A NOTICE OF COMPOUND SYRUP OF TRIFOLIUM AS A THERAPEUTIC AGENT.—All surgeons are familiar with the class of cases to which I would draw attention, and probably there are few of them who have not wished such cases removed from their care. I allude to the large number of strumous children with slowly suppurating cervical and other lymphatic glands, tedious and insidious in their course, and generally, after months and, it may be, years of suffering, ending at the best in elevated or depressed cicatrices and unsightly scars. Under the most careful and judicious treatment the surgeon is liable to bring disgust to his patient and friends and discredit on himself. The old practice by free incisions, blisters, valvular openings, and other means which were in use ten years ago, or have been introduced within that period, I have had recourse to with varying results, a few cases healing kindly, while others (the majority), in every respect favorable, have tried my skill and patience for weeks and even months.

During the past two years I have pursued one of two lines of treatment: 1. Teal's method of dissecting out the enlarged and inflamed glands and scraping old sinuses. I have resorted to this method in three cases, with results which were all that could be desired. The one objection to it is that it is quite an operation and can not be adopted without an anæsthetic. To this the parents and friends of the children frequently object, remarking that they would rather take a longer time than to have an operation performed on their little ones. 2. In the "Annals of Surgery" for December, 1885, p. 493, will be found an editorial by DR. L. S. PILCHER reviewing an article in the "Revue de chirurgie" for May, 1885, by PROF. VERNEUIL, of Paris, on the treatment of cold abscess by drawing off the pus and injecting an ethereal solution of iodoform.

CASE I.—A short time (January 3, 1886) after reading the article referred to I was asked to see a young lady who was suffering from cervical abscess on the left side. She had had a similar abscess on the right side three years before, which had healed, but had left an unsightly scar. Her general condition at this time was poor; she was anæmic, and her occupation (that of school-teacher) kept her closely confined to the house. She told me she could not afford to lose any time, and asked if there was not some way of treating the abscess by which to avoid leaving an ugly scar. I stated to her that I knew of no operation other than dissecting out and scraping the cavity that would give her any relief, but that I would try and devise some form of treatment whereby she would lose no time. She reported at my office the following morning, when I drew off the pus in the abscess with the finest needle in my aspirating case. After the fluid had ceased running I slowly injected 250 minims of a five-per-cent. solution of iodoform in ether. The patient complained of some heat and smarting at the commencement of the injection, but this all passed off before I had completed the operation. The small wound made by the needle was closed with collodion, and the patient was given a tonic containing arsenic, iron, and iodide of potassium.

January 5th.—Patient called at my house. The seat of yesterday's injection is quite swollen, but has lost its soreness and redness and causes her no annoyance.

6th.—Swelling much smaller, free from pain. On the opposite side, just below the old scar, I find a small enlarged gland, which feels soft in its centre, but does not fluctuate. With the smallest needle I injected between 20 and 30 minims of a five per-cent. ethereal solution of iodoform. The injection aroused some pain, which passed away in the course of an hour.

10th.—On account of death in the family the patient was called out of town, and I had not seen her for the past four days. She returned this morning, and came to the office during the afternoon. She says she has suffered no pain nor any inconvenience in or about her neck. The swelling over the site of the first operation is nearly gone, and the skin has resumed its natural color. The seat of the last injection is still quite hard, but the gland is much smaller.

April 3d. — Patient's condition good. All glandular swelling is well gone. There is no evidence on the former site of operation.

The patient passed through a moderately severe attack of typhoid fever during the autumn of 1886. She is now feeling quite well, and is able to attend to her duties as school-teacher. She had no further trouble with the glands on her neck

CASE II.—KATE B., school-girl, aged twelve, of strumous appearance, applied to me (March, 1886) at the Long Island College Dispensary, suffering from an abscess of the cervical glands on the left side of the neck of about the size of a hen's egg. There was only slight redness of the skin, but fluctuation was well marked. By means of a fine aspirating needle I gave exit to a small quantity of thin pus. I then slowly injected into the cavity between 200 and 300 minims of a five per cent. ethereal solution of iodoform. She complained of some heat and pain at first, but both had entirely passed away before she left the dispensary. She was ordered arsenic, iron, iodide of potassium.

Six days later the patient called with her mother, who stated that her daughter had been at school regularly since: had not com-

plained of any pain. The swelling was of about half the size it was when I injected it. Over the site of the injection a small spot of induration could be felt. The mother called my attention to the child's tonsils, which were enlarged. I directed her to paint them with tincture of iron three times daily, and to keep on with the medicine. At the end of the ninth day the swelling was fully two-thirds smaller; no pain, redness, or heat; appetite good; and the patient said that she felt better.

I did not see this patient again until October, 1886, when the mother called to have me attend to her son, who had received a fracture of the humerus. She said that her daughter had no more trouble with her neck since the operation, a statement which I was able to confirm a few days later, when I had an opportunity to examine the daughter.

CASE III.—July 1, 1886. ROBERT J., aged ten, in poor health. He had a swelling on the right side of his neck of about the size of an English walnut, bluish-red, evidently about to break. The case was an unfavorable one for injection; but, at the earnest request of his father, who had seen the effect in the first case cited above, I consented to operate. I drew off the pus, which was thin and watery, and contained small pieces of cheesy matter, and injected the cavity with a five-per-cent. ethereal solution of iodoform. The operation was performed with great care, but just before I applied the bandage I noticed a small space where the solution was oozing out. The case progressed fairly well for the next two days, when (July 4th) the patient went on an excursion contrary to my wishes. On the way back a severe thunder-storm broke over the grove. The party that my patient was in got thoroughly wet, and, having no means of drying themselves, had to remain in damp clothing the rest of that day (about eight hours). That night I was sent for to see my patient. When I reached the hotel where he was staying I learned that a short time before they sent for me he had had a chill, and was complaining of a severe pain and burning over the left side of his neck and face, which were much inflamed. He was ordered quinine and iron, and his face and neck were bathed with a solution of biniodide of mercury, 1 to 3,000. The following morning I found him much better, the pain and redness nearly gone. The abscess which I had injected was about the same in size, but had lost its red, angry look. At the end of three weeks the swelling was entirely gone, leaving a very trifling scar, in marked contrast with the scar on the opposite side of his neck, where he had suffered from another abscess some time before.

I have treated by the method now mentioned nine cases in all. The swelling has gradually disappeared, taking from three weeks to two months.

PROF. VERNEUIL'S plan is, first to evacuate the abscess by aspiration. To do this he makes use of a large-sized trocar, handling the parts as little as possible. As soon as the liquid becomes slightly blood stained he injects the cavity with the solution which is one of five per cent. The largest quantity used is one hundred grammes; generally fifty or sixty suffice. The amount of iodoform remaining in the abscess cavity to be absorbed rarely exceeds four to five grammes. He has never seen any bad effects from the absorption of ether.

My experience has been that generally one injection will be sufficient. In only three cases have I found it necessary to repeat the injection into the same swelling. In four cases I injected glands where I could not find pus, but where the centre of the swelling was soft and in a condition to break down. In such cases my plan is to inject from ten to twenty minims of a two-per-cent. to three-per-cent. solution. In all cases the swelling is gradually reduced, so that in from four weeks to three months it has entirely disappeared. In all my cases I have employed internal treatment, as all the patients were more or less anæmic. Up to some six months ago I had been using a tonic containing arsenic, iron, and iodide of potassium; but, on account of the difficulty apothecaries have in making up a pleasant mixture that children would take, I have had some trouble in keeping up the treatment with the regularity I would like.

About six months ago I received a sample bottle of compound syrup of trifolium, which is a mixture containing iodide of potassium, combined with the vegetable alteratives red clover, burdock-rook, prickly-ash bark, stillingia, poke-root, and *Berberis aquifolium*, each ounce containing eight grains of the iodide of potassium. The skill of the manufacturers, Parke, Davis & Co., has succeeded in so combining these drugs as to render the finished preparation very palatable—a property most essential to a preparation which is designed for prolonged administration.

I am in the habit of using iodide of arsenic, bichloride of mercury, sulphide of calcium, or iron, with the compound syrup of trifolium. Children will take this combination for a long time and not be troubled with nausea or any derangement of the stomach. I have a patient, a child, suffering from congenital syphilis, who has taken it since its first introduction, six or seven months ago. She is taking one-fiftieth of a grain of bichloride in half an ounce of the compound syrup of trifolium, and has improved in every way while under its influence.

From my experience with this syrup in a great variety of cases, and from the very satisfactory results which I have obtained from its use, I am of the opinion that it is destined to occupy a high position among our therapeutic resources.

Since preparing the foregoing paper, I have learned that PROF. VERNEUIL has substituted glycerin for ether, using fifteen to twenty grammes of iodoform in sufficient glycerin to make a thin paste. I learn also that PROF. BILLROTH, at his clinic, uses a solution of ten parts of iodoform to one hundred parts of glycerin, for the same purpose, and speaks very highly of it.—H. C. ROGERS, in New York *Medical Journal*, June 25, 1887.

TREATMENT OF FUNCTIONAL INSOMNIA.—In a paper read before the New York Neurological Society, and published in the Medical News, May 28, 1887, DR. B. SACKS, after discussing the causes of functional insomnia and citing the history of typical cases, considers the treatment as follows:

As for the treatment of cases of functional

insomnia, I would suggest, as the result of my experience with twenty-four recently treated cases of functional insomnia, that if it be due to mental overwork, or other exhausting causes, these be first removed. Pronounced anæmia and general neurasthenic symptoms should be treated at once by the ordinary blood and spinal tonics; but, above all, every precaution should be taken to increase the force of the heart and of the whole circulatory apparatus; and that this cannot be done better in any way than by the use of cool douches to the head, chest, and spine; by prescribing a bland diet, together with some alkaline water, and by compelling the patient to take considerable outdoor exercise, either in the form of walking several hours each day, or of riding, rowing, bowling, and the like. During the summer months, mountain climbing, if not carried to excess, would be an admirable substitute for such exercise as we city people are at other times compelled to take.

The adoption of the rules laid down by Oertel would surely be followed by good results.

The substitution of passive for active exercise is, in my opinion, not sufficient, and incidently I may remark that a patient who was otherwise doing well under a modified Weir Mitchell treatment was, during the greater part of the time, a great sufferer from insomnia.

After a few weeks of such treatment, I believe there will be a marked improvement in many, if not in most cases of insomnia. But patients have an annoying way of wishing to obtain prompt relief, and obtaining this they become more tractable, more amenable to every other form of treatment. It is on this account chiefly that we cannot dispense altogether with hypnotics, and must administer them occasionally in spite of ourselves.

Summarizing the experience I have had in the above cases of functional insomnia seen during the last year or more, I find that I have used for treatment chloral and bromide, the bromides separately, the amorphous hyoscyamine, paraldehyde, urethan, and, in a single instance, hypnone. Morphine I have never used in these cases, as I object to it in all cases in which there is not severe pain, and certainly object to it in cases such as these when the patient would be quite prepared to contract the habit. The bromides alone have been of occasional service to me if given in one-half to one drachm doses, in cases of extreme restlessness, but even in these I have learnt to substitute the amorphous hyoscyamine in doses of about one-twentieth of a grain, repeated every three hours.

I object most strenuously to the plan advocated by Dr. W. A. Hammond and others, of keeping these patients for a long time under the influence of the bromides. These neurasthenic patients require all the will power they can possibly command, and are in much greater need of tonics than bromides. It is easy enough to bring about a condition of semi-stupor in such patients, but that is not equivalent to bringing about healthful sleep.

Paraldehyde I used freely about nine months ago, and for several months later. I gave it in doses of one to one and a half drachms in claret. This dose was always sufficient to bring about sleep the first few nights, but if required beyond this time, the drug proved unsatisfactory, as the hypnotic dose had to be increased, and, while I noticed no deleterious action upon the heart or other organs, the odor it imparted to the breath was excessively disagreeable. One female patient, whom I had not had occasion to see for some months, sent for me one morning after she had had a sleepless night. She had been using paraldehyde steadily in spite of my remonstrances, and I found, on entering, that the room was actually filled with the exhalation of paraldehyde.

Urethan had been satisfactory in a number of cases. It has no disagreeable after-effects, and does not irritate either the stomach or bowels. It has been my experience that the dose should be between two and three grammes, and that greater quantities of Merck's preparation induce wakefulness rather than sleep.

The mixture of fifteen grains of bromide and twenty grains of chloral has often come to the rescue when every other hypnotic refused to act. I have seen no ill effects follow the exhibition of this mixture, even in cases of weak heart.

A word as regards electrical treatment. In several cases in which no other remedy could secure relief, I have been able to induce sleep by galvanism applied to the head after the patient had retired for the night. I have given galvanism in the form of subaural, supposed sympathetic galvanization, and by passing currents directly through the head, with one pole on the nape of the neck, and the other on the forehead; changing cautiously the nature of the poles, and allowing the current to flow in an opposite direction, and never using a current of more than two milliampères. Occasionally I place one pole over each temple. I have not been successful in the endeavor to bring on sleep by general faradization. Faradism to the head I would not apply under any circumstances. Moreover, so far as our present knowledge goes, galvanism is more effective than faradism in bringing about vasomotor changes.

If I have accomplished nothing else, I trust I have convinced some of you that in the treatment of these cases of neurasthenic insomnia, we are in need not so much of additional hypnotics, as of more effective means of regulating and influencing cerebral circulation.

Treatment of Gastralgia. — Gallard advises the following treatment:

Before each meal a drop of this mixture on a lump of sugar.

℞ Morph. hydrochlorat., grs. 1½.
Aquæ lauro-cerasi, ♏ 75.

At the end of a month replace the morphia by one of the following pills:

℞ Ferri arseniat., grs. 1½.
Extr. valerian., grs. 75.
M. Ft. pil. 50 in num.

The treatment should be thus alternated month by month. While using the solution a spring-water containing iron should be drunk at meals. While taking the pills wine or carbonate should be taken.

Two hours after dining a teaspoonful or tablespoonful of the following should be taken.

Potassii bromid., ʒ 2½.
Syr. aurantii cortic., ℥ 5.
M.

Cold shower-baths, of fifteen seconds, may also be used.—*Les Nouveaux Remèdes*, May 8, 1887.

AGARICIN AS USED IN BELLEVUE HOSPITAL.—Agaricin (the active principle of agaricus albus) gives uniform results in checking excessive perspiration in phthisical and fever patients. The following formula is used at Bellevue Hospital:

℞ Agaricini (Merck), gr. x.
Atrop. sulph., gr. j.
Acidi sulph. arom., ♏ 1200.
Dissolve and filter.

Dose.—♏x, containing $\frac{1}{12}$ gr. agaricini, $\frac{1}{120}$ gr. atrop. sulph. and ♏x arom. sulph. acid. To be administered in syrup or simple elixir.

It may also be advantageously given in pill form, combined with Dover's powder. Thus:

℞. Agaricini, gr. ij.
Pulv. Doveri, gr. xxv.
M. Ft. pil. No. xx.

Sig.—One pill five or six hours before retiring or sweat comes on. Its action is slow, hence the necessity for giving it early.—*Quarterly Bulletin*, April, 1887.—*Med. News*, July 2, 1887.

COLD IN THE TREATMENT OF LOCALIZED NEURALGIAS.—The many and various methods which have been introduced for the relief of this most painful and annoying affection, particularly when occurring in nerves situated in superficial regions, have none of them, unfortunately, brought the widespread and permanent relief for which their originators hoped. Although the discovery of a cure for all neuralgias is probably an impossibility, owing to their many causes, it is perhaps fortunate that the physician has so large a number of therapeutical resources, since he can always tell the sufferer of the cures which still another remedy has effected.

Almost all the remedies which have been used locally for this affection have belonged to one of two classes, namely, counter-irritants and sensory nerve paralyzants. Lately, however, extreme cold has been tried with no small degree of success, and although its use is by no means novel, it may be of interest to call attention to the results obtained.

Early in April of the present year M. DEBOVE reported to the Société Médicale des Hôpitaux no less than one hundred and sixty-eight cases treated in this manner, of which one hundred and fifty were cases of neuralgia of the sciatic nerve. His results are even startling in their success, and if further experiments show that they are to be relied upon, a remedial measure of great value in such cases is given to the profession, for only in ten cases did relief fail to appear, while in the treatment of eighteen cases of facial neuralgia, but two were unsuccessful, notwithstanding the fact that several of them had heretofore proved most intractable. Thus he mentions the case of a woman who had suffered for years with neuralgia of the face, and who had submitted to section of the nerve no less than three times, in whom these cold applications effected a cure in two months.

M. DEBOVE, after stating that he had used the chloride of methyl in the form of a spray for the purpose of lowering the temperature of the area involved, proceeds to warn us against the discoloration of the skin which sometimes follows its use, and insists that the surface and not the deep parts should be treated. It seems probable that the cold must act in quite a different manner in the case of neuralgia of the sciatic and of any of the facial nerves, since in one case the nerve fibre is much more deeply buried than in the other, so that while the facial nerves are directly acted on by the cold, the sciatic is only affected by the increase or decrease of blood and warmth in its immediate neighborhood.—*Med. News.*

GAVAGE OF THE NEWBORN.—Gavage was first employed by TARNIER in the case of infants born prematurely; and it is recommended also, for those who, though born at term, suffer from coryza, or who have just been operated upon for harelip, the former not being able to nurse, while in the latter the movements made in sucking interfere with the primary union. In the *Archives de Tocologie* for March 30th, we find a description of the method of gavage advised by BAR.

Human milk is, of course, preferable, and next that of the ass. But instead of these cow's milk may be used, prepared according to the following method advised by TARNIER. One part of sugar is added to twenty parts of water, and this is added to cow's milk in the proportion of three to one. The mixture is kept in boiling water for half an hour; then the sterilized liquid is decanted, and placed in a suitable vessel of glass or of porcelain.

The simplest form of apparatus, advised by BAR for administering this food to the infant is composed of a glass funnel to which a sound (No. 14), or a rubber tube of the same diameter, but twice as long, is attached. The funnel and tube being filled, pressure is made upon the tube just below its attachment to the funnel, in order to prevent the escape through the lower end. The infant is placed in the lap of a nurse, the head moderately extended, and the physician holding the apparatus in his left hand, takes the free end of the tube in his right hand and, after moistening it, passes it into the back part of the throat, and thence by gentle pressure into the œsophagus: when about six inches of the tube have passed the lips the end is in the stomach, and the compression of the tube is stopped, and the liquid passes simply by gravitation into the stomach. The tube should be removed immediately after the funnel is emptied, in order to prevent regurgitation: the quantity of nourishment used should be, if the infant is very small, only two

or three drachms, and in that case the gavage should be repeated every hour. Fermentation of the nutritious mixture should be prevented by the proper preparation of the latter, by washing out the apparatus with a one per-cent. solution of boric acid, and by keeping the apparatus in the intervals between its employment in a similar solution.

The results of this treatment have been so satisfactory in Paris—many infants having been saved by it that would otherwise have perished—that it is worthy of a more extensive trial.—*Med. News.*

NUSSBAUM'S VIEWS ON THE LOCAL TREATMENT OF ERYSIPELAS.—It is but recently that the true character of erysipelas, as an infectious disease, has been recognized. Within the last ten years great changes in the method of treating it have taken place, at first without much success. Removal of sources of infection in the body, attention to hygienic conditions, cooling of the inflamed surfaces, local applications of tr. iodi., turpentine, and arg. nit., use of the knife or cautery, and administration of antipyretics did little to check the advance of the disease.

Later, when HUETER had demonstrated that cocci were to be found in the skin where erysipelas was present, and were absent elsewhere, the antiseptic method was tried. Erysipelatous surfaces were painted with tar, oil of eucalyptus, turpentine, carbolic acid, and boracic ointment, and foul-smelling openings were washed with strong carbolic solutions, still without preventing the progress of the disease.

But injections of 2-per-cent. carbolic solution around the margin of the erysipelatous surface, and of a cubic centimetre of the solution into each four or five square centimetres of the surface, arrested its spread in every case. However, this treatment was found very painful, as was also KRASKE'S method of scarifying and overlaying with carbolic compresses.

VON NUSSBAUM states that erysipelas may be healed quickly and without pain by the use of ichthyol. The wound attacked by erysipelas was disinfected and covered closely with iodoform gauze. The erysipelatous surface, while still spreading, was painted with ointments made of equal proportions of ichthyol and vaseline. The part thus painted was covered with 10-per-cent. salicylic lint, and fixed with a gauze bandage. Next day the border was found to have remained stationary, while the inflamed surface was shrunken into yellowish-brown creases, and was painless. After three days the dressing was discontinued, as it began to affect the skin. Five consecutive cases gave equally successful results. Ichthyol collodion is recommended for applications to the face, and ichthyol soap for the scalp. VON NUSSBAUM considers ichthyol a reducing agent, *i. e.*, as acting on the cocci by making the soil where they multiply unfit for their nutrition. He does not regard it as an antiseptic, though it is so considered by some surgeons.—*Med. Press*, June, 1887.

ARTIFICIAL AND HYPERALIMENTATION IN PHTHISIS.—In an account of the effects of artificial and hyperalimentation, as practised in PROFESSOR PEL'S wards in Amsterdam, DR. VAN EEDEN states that the meat-powder treatment introduced by DÉBOVE (which he had had an opportunity of studying in Paris) is always of service in phthisis when the disease is not very far advanced, and when it is not of a "malignant" nature. The cases which do best under this treatment are those in which there is no hereditary taint and where the disease has progressed regularly, with a not very rapid loss of strength, and with only slight hectic, anorexia, anæmia, and emaciation. The chances of successful treatment are slight where the disease has made rapid progress, with a continuous high temperature. The existence of a considerable degree of pyrexia is, however, no contra-indication to the use of the treatment. If diarrhœa and gastric irritation are produced by the artificial alimentation, it is best to discontinue it. In order to accustom the stomach to the meat powder, small quantities only should be given at first—not more than about half a pound during the twenty-four hours; this amount may gradually be increased to one pound and a half. The use of the œsophageal sound for the introduction of the food is considered by DR. VAN EEDEN as advisable in all cases, and imperatively necessary in hyperalimentation. Quantities exceeding three pounds of meat powder per diem, however, are not by any means always required, and should only be given when smaller amounts do not succeed, and where the patient bears the treatment well. The method must be diligently and patiently practised, and the weight of the patient accurately noted. DR. VAN EEDEN remarks that so little is known of the way in which hyperalimentation controls the development of tubercle, that whoever attempts to practise DÉBOVE'S treatment must be prepared to meet with many difficulties and disappointments. Notwithstanding this, however, he had witnessed some surprisingly good results from its employment.—*Lancet*, April 30, 1887.

COLLECTIVE INVESTIGATION OF HAMAMELIS AND TEREBENE.—The Collective Investigation Committee of the British Medical Association, through its Chairman, DR. ISAMBARD OWEN, has made a preliminrry report on the action of hamamelis and terebene, of which the following is an abstract:

Hamamelis—The form of preparation you employ, the doses? Is it efficacious in checking epistaxis? Hæmoptysis? Hæmaturia? Menorrhagia? Piles? Is it efficacious in the treatment of any other form of disease? Has it given rise to disagreeable symptoms?

The observer was requested to state upon how many cases of each affection his experience was founded. Forty-one reports to this series of inquiries was received. Tinct. hamamelis was the more general form of the drug used. Its benefit in all the cases used was distinctly recognized, and, in addition to the diseases above specified, hamamelis was recommended in the treatment of the hæmorrhagic diathesis, in catarrhs of the air passages, especially the upper regions, in some forms of diarrhœa, in prolapsed rectum and in chronic catarrh of the uterus.

Terebene—The inquiries upon this subject were: What is your experience of its effect in

chronic bronchitis? Chronic pharyngitis? Chronic trachitis? Subacute or chronic laryngitis? Phthisis? Wooping-cough? Pure asthma, not connected with bronchitis? Cystitis or gleet? Acidity? Flatulence? As an anthelmintic? Is it efficacious in the treatment of any other disease? Have you found it give rise to any disagreeable symptoms? How many cases of each affection do you base your experience upon? To this form of inquiry but twenty-six replies were received. From these it could not unfairly be concluded, from the weight of affirmative statements, that pure terebene is a drug of considerable value in shortening the course of chronic catarrhs of the air passages, though hardly to be considered as a specific. Flatulence and acidity of the stomach, it appears to not unfrequently relieve. There was no certain evidence of any untoward effect from its use.—*Sacramento Medical Times.*

Injections of Eucalyptol in the Treatment of Certain Pulmonary Affections.—The administration of eucalyptol hypodermically constitutes a noteworthy improvement; absorption is more rapid, more complete, and gastro-intestinal intolerance is no longer to be feared. Dr. Cenas recommends a solution of eucalyptol in liquid vaseline—1 cubic centimetre of the oil containing .25 centigramme of eucalyptol (1 in 4). Injected beneath the skin, it passes promptly into the circulation, and is eliminated by the lungs. It sometimes gives rise to a sensation of discomfort, of intra-thoracic constriction, etc., but these symptoms soon disappear. The injection itself is apt to be painful if performed in the thigh; is quite painless if performed on the abdominal walls, and does not leave any induration. The therapeutical action of eucalyptol is not constant, but, when it is produced, it is very rapid. The very next day, sometimes even the same evening, the attacks of cough become less frequent, the breathing freer, and the pseudo-asthmatic attacks less severe. In the course of a day or two the expectoration is modified in quantity and quality, and its purulence gradually becomes less until the expectoration is mucous only. In from ten to twenty days the stethoscopic signs will have disappeared, the appetite will have returned, and the general condition improved. These results were obtained in a third of the cases, after from three to five injections; in another third, after from ten to fifteen injections. It was never found necessary to exceed .5 centigramme of eucalyptol, and, generally speaking, not more than .25 centigrammes were given in the twenty-four or forty-eight hours. In cases which resisted this treatment no advantage attended doubling or trebling the dose; similarly, when the expectoration was not modified within ten or fifteen days, it was found useless to continue the treatment. Moreover, in such cases the patients early complain of intra-thoracic tension, headache, and gastric cramp. Eucalyptol is not beneficial, and even dangerous in the febrile form of phthisis, and it is contra-indicated in the earlier stages of phthisis, or where disseminated caseous nodules are suspected. It is likewise contra-indicated in bronchitis with fever. In sum, it is only of use in ulcerative phthisis and pulmonary catarrh.—*London Med. Record.*

Nutrient Enemata.—The Therapeutische Monatshefte for April, 1887, gives the following formula used by Ewald, and adds further details in the preparation of nutrient enemata.

The simplest enema is prepared by beating up three or five eggs with five ounces of a solution of grape sugar fifteen or twenty per cent. in strength; this should be gently injected as occasion offers.

To allay irritation starch solution or mucilage water may be added, making the liquid of greater consistence; or a few drops of tinct. opii may be used. Before the nutrient enema is given an injection of tepid water or solution of common salt, eight and a half ounces of fluid, should be used, and the nutrient enema not introduced until the bowel is thoroughly emptied. If this precaution is neglected, the nutrient enema may be immediately rejected. An enema should never be larger than eight and a half ounces. It is better when this quantity is given in two or three doses during the day.

Nutrient enemata may be prepared as follows, when more elaborate methods can be followed:

Two or three eggs should be beaten with a tablespoonful of cold water. As much powdered starch as will lie upon the end of an ordinary kitchen knife should be added, with half a cup of twenty per cent. solution of grape sugar (obtainable at druggists); the whole should be heated gently, and a wineglassful of red wine (claret, etc) added.

The mixture should be gently beaten, care being taken that it is not so hot as to coagulate the albumen of the eggs used. The whole should not exceed half a pint in bulk.

If meat peptone or milk peptone is convenient, a teaspoonful of the peptone should be added to the sugar solution; it is not necessary, for eggs so prepared will be readily absorbed.

The injection should be given with a syringe having a long, flexible tube, or with an irrigator which has a flexible tube with large opening.

After injections the patient should lie quietly upon the back or side for some time.—*Medical News*, June 4, 1887.

Administration of Carbonate of Lime as a Means of Arresting the Cancerous Tumors.—Peter Hood, M. D., in London Lancet, May '87, says:

It is not in cases which admit of any reasonable doubt of their nature that I would desire to urge a trial of the lime powder upon the profession. There are hundreds of instances of unmistakable cancer in which an operation, if performed, may perhaps for a time diminish suffering or may prolong life, but in which it cannot afford any well grounded hope of restoration to health. For all such I would say that the lime ought to be persistently and fairly tried. It can do no possible harm, it need not interfere with any remedies for the present relief of pain, its action can be referred to a perfectly intelligible and probable hypothesis, and it has been of unquestionable utility in a sufficient number of cases to warrant us in reposing some confidence in its use. We have a great hospital devoted to cancer, and cancer wards in others also; and I think the time has come when this simple means should be fairly

tested by the profession. It is not long since we witnessed an extraordinary eagerness to try the Chian turpentine, which was so much extolled by DR. CLAY, and in support of which the *prima-facie* case was nothing like so strong as that in favor of the remedy to which I desire once more to call attention.

OIL OF MULLEIN IN ENURESIS.—While the subject of mullein oil is yet warm, it might be well enough to refer to its use as a remedy for enuresis. We have recently heard a report from it in an obstinate case of nocturnal enuresis, that has resisted the most strenuous preventive measures, rhus aromatica, scutellaria santonine, belladonna, and numerous other agents, where the effect of the aforesaid remedy has been prompt and satisfactory.

It is not probable that it will prove a specific in every case, but it should be added to the list as an agent liable to do good work in time of need.

DR. CUSHING, of Lynn, Massachusetts, who has made this remedy something of a pet, made a proving of it a number of years ago, and found dribbling of the urine a prominent symptom. "Since that time," he writes, "I have treated many cases of enuresis, mostly nocturnal, some of which had resisted years of treatment, both by old school and new, and I do not know of one thus treated that has not been cured."

The dose will vary somewhat with the caprice of the prescriber. We would suggest a dilution of the oil in alcohol—one part of the oil to fifty or a hundred parts alcohol. Of this give five or ten drops at a dose, repeating four or five times daily.—*Cal. Med. Jour.*, June, 1887.

MOMORDICA BUCHA.—At a recent meeting of the Paris Biological Society, M. A. DUPRAT made a communication concerning the physiological effects of the *momordica bucha*, a cucurbitaceous plant of Brazil. The fruit of this plant is prescribed in dropsy. It may be given in injections composed of the watery extract of the fruit, or as a draught prepared from the fruit, after it has been macerated in brandy at 25° C. (77° F.) The injection acts as a drastic purgative, giving rise to severe pain, whilst the draught causes vomiting. *Momordica bucha* is used only by quacks, and is generally considered dangerous in Brazil. M. DUPRAT has made experiments with the extract obtained by hydro-alcoholic maceration of the fruit, diluted with water. From these he concludes that *momordica bucha* acts as a local irritant, causing vomiting and diarrhœa, according to the dose and the manner in which it is administered; it will cause death if taken in sufficiently large doses. The use of the drug by unqualified persons should be forbidden, but in the hands of medical men it may be very useful as a purgative.—*British Med. Journal*, May 28, 1887.

A NEW METHOD OF INDUCING ANÆSTHESIA.—M. TREPANT, of Amiens, has called attention in the Revue de Therapeutique for May 1, 1887, to a mode of inducing anæsthesia devised by him, which has, apparently, succeeded perfectly. The method consists in giving every five minutes a spoonful of the following mixture, until all is taken; Syrup of morphine (French Codex) ʒ iv; chloral hydrate, 46 grains. Allowing twenty minutes for the absorption of this medicament from the stomach, chloroform is then given by inhalation in the usual way. The patient quickly passes into the anæsthetic condition, without excitement, and without nausea and vomiting, and the time of the insensibility is prolonged without further use of chloroform, of which but a small quantity is required to produce entire insensibility.

It is obvious that M. TREPANT'S method is only a modification of that known for several years as "mixed anæsthesia," and it is probably not more efficient than the latter, whilst it may be more dangerous.—*Medical News*, June 11, 1887.

THE THERAPEUTIC VALUE OF BLOOD LETTING.—An editorial in the N. Y. Medical Journal, June 25th 1887, thus summarizes present medical opinion on this subject:

Blood-letting should not fall into utter disuse. Weighty accusations have been brought against it, but let us allow only what is confirmed by modern scientific research—namely, its powerlessness in inflammations and in fevers, its dangers in chronic affections, and the obscure rôle it plays in neuroses and in eclampsia; while physiology, in spite of its gaps, teaches the therapeutist that the blood is always being renewed, that the stability of the circulation is not hindered by a moderate blood letting, and that, although a powerful modifier of the circulatory equilibrium, this agent has no other dangers than those that arise from its over-abundant employment, its excessive repetition, and it sinopportune use. Physiology teaches us also that the philosophy of this therapeutical measure, around which too much majesty and solemnity have gathered, is found not in systems, but in the modest aphorism: "Use, do not abuse!"

IRON AS AN ADJUVANT IN DYSPEPSIA.—In the Gazette des Hôpitaux M. BLONDEL publishes a note on iron as an adjuvant in certain cases of dyspepsia. It being admitted that dyspepsia produces anæmia, it seems natural to the author that iron should be added to the varied medication employed in dyspepsia. The great difficulty of absorbing this drug is overcome, the author thinks, by the employment of albuminate of iron. Being combined with a proteid substance, the iron is, so to speak, already partly digested, and its absorption becomes easy. Moreover, this combination of iron and albumen seems well suited to combat the alteration of the blood which is characterized by a decrease in the quantity of albumen. The author administers this medicament in the form of "Liqueur de Laprade," in which the albuminate of iron is mixed with the syrup of orange-rind, which latter is advantageous in combating atony of the stomach. Dose, one tablespoonful (5 centigrammes of the metal in a state to be assimilated) after each meal.

THE EFFECTS OF HOT-AIR BATHS ON ASSIMILATION.—In a paper by DR. GARIN, of St.

Petersburg, on the effects of hot-air baths on healthy subjects, and on those suffering from kidney disease, it is stated, as the results of his researches, that the sudorific action of hot air produces an increase in the quantity of the nitrogenous elements of food assimilated. In healthy subjects it was found that after a course of hot air baths lasting for five days the nitrogen assimilation was greater than before the baths, though less than during their continuance. This, however, did not appear to be always the case with patients suffering from nephritis. Again, the ratio of the urinary nitrogen to the nitrogen assimilated—that is to say, the nitrogenous metabolism—was decidedly increased both during and after the baths, the subsequent effect being more marked in the case of nephritic patients than in that of persons in good health, though not in either case so great as the effect observed while the baths were in progress.—*Lancet.*

Chloride of Methyl in Neuralgia.—At a recent meeting of the Société Médicale des Hôpitaux, M. Debove made some remarks on the use of chloride of methyl in neuralgia. Since his last communication to the Society in in 1884, M. Debove has treated 150 cases of sciatica with this medicine, and found only one case in twenty that was not amenable to its action. Lumbago and neuralgia are cured by chloride of methyl almost instantaneously; in case of relapse, the pain easily gives way under its influence. Erythema should never be produced in the treatment, the action should be rather superficial, and the greatest number of nerve branches possible should be excited. Great precaution should be taken with patients affected with diabetes and albuminuria, and also with patients whose skin is very irritable. Out of eighteen cases of facial neuralgia, sixteen were cured in this way. The medicament may be sprayed on the face without inconvenience.

Electrical Acids in the Treatment of Insomnia.—Simple anodic faradization of the occiput is frequently attended with most gratifying results. In making this application the cathode should be placed in the position least likely to give rise to sensation (on the heel is preferable, but *not* on the thin skin of the instep), both poles being well moistened. The current is increased at once from the initial weakness to a strength that is distinctly felt at the anode, and is not increased further, notwithstanding the rapid fading of the sensation as the nerve ends become tolerant of the stimulus, for a gradually increasing faradic current is anything but sedative. The full effect of this application requires the note emitted by the the hammer of the interrupter shall be clear and free from quavers due to irregular vibrations.—Dr. G. B. Massey, *Medical News.*

Alimentary Regimen in Biliary Lithiasis.—Dujardin-Beaumetz recommends the suppresssion of all fatty substances and the carbo-hydrates which may furnish cholesterine. Peas especially should be forbidden, as they contain a fatty substance similar to cholesterine. The exclusive use of meat should be avoided, and eggs should be rarely eaten. A mixed diet, composed of meat and green vegetables is the best. All green vegetables may be eaten, and also potatoes. Fruit may be taken, if not too sweet. Pastry should be forbidden. Meals should not be taken too often, in order to give frequent employment to the gall-bladder. Wine mixed with mineral water forms a good drink. The bowels should be kept free, and plenty of exercise taken.

Solutions of Cocaine in Liquid Vaseline.—Cocaine in liquid vaseline or petrovaseline to the extent of 2 per cent. This solution is limpid, and does not deteriorate on keeping. It is very active as a local anæsthetic, increasing the zone of diminished sensation, and permits of less doses being used, whereby the risk of undesirable symptoms is avoided. In ophthalmia it is very useful, one drop being sufficient to cause complete anæthesia. Four grammes of the solution have been injected for surgical purposes without any untoward result. He advises a small incision to be made, and the solution dropped upon it. The operator waits a minute, and then makes a further incision until the patient feels pain, and so on. —Bignon, in *London Med. Record.*

Lactic Acid in Infantile Diarrhœa.—The latest recommendation for the treatment of the "green diarrhœa" of infants is that of M. Hayem, who has tried with much success the hydrochloric and lactic acids, the latter being preferred. A teaspoonful of a 2-per-cent. solution of lactic acid is given after each stool, as much as from forty to sixty centigrammes a day being taken by the infant. M. Lesage has investigated the stools and has discovered a microbe, which will probably receive more attention. The activity of this microbe is diminished by acids, hence the explanation of the value of the above treatment. —*London Lancet.*

An Enema for the Convulsions of Children.—"Nouveaux remèdes attributes the following formula to Dr. J. Simon:

Musk, 3 grains;
Camphor, 15 grains;
Chloral hydrate, 7 grains;
The yolk of one egg;
Distilled water, 4 ounces.

The rectum is to be emptied by a simple enema before this is injected.—*N. Y. Med. Journ.* June 4, 1887.

Arseniate of Strychnine and Pepsine. —Aurillac has found the following useful in dilitation of the stomach and constipation:

Pepsine, 1½ grs.
Ext. of malt, ℥2.
Arseniate of strychnine, $\frac{1}{130}$ gr.

For four capsules or wafers.—*Les Nouveaux Remèdes*, May, 1887.

The Medical Age.

Vol. V. DETROIT, JULY 25, 1887. No. 14.

Original Articles.

A CASE OF PERICARDITIS AND ENDOCARDITIS.*

BY ROBERT H. BABCOCK, CHICAGO, ILL.

MRS. B., aged 23, Norwegian, consulted me April 30, 1887, complaining of præcordial pain and dyspnœa. History was as follows: Her mother died of heart disease; father in good health; youngest sister has heart disease as result of rheumatism; strong family predisposition to inflammatory rheumatism. After birth of only child, six years ago, patient was ill a year of rheumatic fever, but had no knowledge of heart or lung complications at that time. Since fore part of last winter has been suffering with rheumatism in ankles, left knee and corresponding shoulder. For past three weeks has been unable to lie down because of pain in chest and shortness of breath. No history of any lung trouble.

Her symptoms were acute præcordial pain, intensified by dorsal decubitus, pressure and full-inspiration; also slight joint pains. Cough troublesome, with mucous expectoration; sleep very broken; appetite poor; constipation; dry, coated tongue; no fever; pulse 120, feeble and unequal. Respiration short, hurried and sighing.

Examination of heart revealed impulse in fifth interspace outside of mammary line, feeble and preceded by a short thrill, a very marked pulsation in the third left interspace close to sternum, due to closure of pulmonary valves; considerable increase in all diameters of the area of præcordial dullness, particularly above and toward the left, where the lung border was retracted and fixed. Upon auscultation was heard a short, rough, presystolic murmur at the apex, followed by a higher-pitched systolic whiff, which latter murmur was propagated into axillary region and unto the base of the heart. Over the body of the organ was also heard a rough sound of rolling character, not unlike the rhythm produced by the hoofs of a galloping horse. Owing to the weakness and evident misery of the patient the lungs were not examined, a fact I now greatly regret. The diagnosis was acute simple endocarditis, supervening upon chronic endocarditic changes; mitral stenosis and insufficiency; pericarditis and possibly myocarditis; chronic inflammatory rheumatism. Rest in bed, hot applications to the præcordia, salicylate of sodium and digitalis in small doses were prescribed. In a day or two the digitalis was discontinued, however.

Under this treatment the pain in the chest was abated and the patient's condition improved, although the pain in the joints continued. At the end of ten days, upon her urgent solicitation, she was permitted to get up and lie on the lounge. The pulse never became slower than 110 to the minute, which I considered a bad indication from the close of the first week. At the end of another ten days or so she took to her bed complaining of anorexia, nausea and inability to retain food. The tongue was heavily coated and dry, and slight catarrhal icterus developed. A few small doses of calomel, followed by an alkali and simple bitter, afforded prompt relief, and for the next week the patient appeared to improve in some respects. Her condition was tolerably comfortable by day, but by night she suffered much from restlessness, pain and dyspnœa. Repeated examination of the heart disclosed no increase of præcordial dullness, while the endocardiac and friction murmurs became even more intense and characteristic, except for a short time, during which the urine was very scanty. The lessened intensity was probably due to effusion, as very likely also was the abatement of pain. Under the effect of a diuretic the friction sounds reappeared with added distinctness. June 2d she suddenly developed an attack of rheumatism of the left wrist and thumb joints, with coincident aggravation of chest symptoms. A double to-and-fro friction sound became remarkably distinct over and about all the ensiform cartilage. Temperature was 102 F. Salicylate of soda brought prompt relief from pain, with, however, but slight effect on the temperature. The urine, which was intensely acid, was rendered alkaline by bicarbonate of potash.

Sunday, at 2 o'clock A. M., she was seized with a sharp pain in the chest and epigastrium, lasting two hours, only relieved by opium. When I visited her next day she was suffering much from dyspnœa and exquisite pain in the epigastrium. The lightest pressure could not be borne, while the abdominal walls were very tense. Satisfactory percussion and palpation were out of the question, and hence I was greatly puzzled to account for her symptoms.

* A paper read before the Chicago Medical Society.

Her pulse was 138 and very feeble. Cursory examination of the lungs disclosed mucous râles at right base posteriorly, and slight dullness below the angle of left scapula, with tympanitic note above. A loud, rough systolic murmur obscured the respiratory sounds, but the voice was heard with great distinctness. hot applications to the epigastrium afforded relief to pain and the abdomen became less tense. At 11 P. M. of Wednesday there was sudden defervescence, followed by profuse perspiration for the balance of the night. Thursday P. M. she was without fever and comparatively free from pain. Upon examining the chest I found the physical signs very much as three days before, except that there were moist, for the most part subcrepitant, rales over the area of dullness; voice very distinct. Cough was well-nigh impossible by reason of pain; the scanty expectoration had a slight brownish-red tinge. I made up my mind that I had a pneumonia to deal with, which had sneaked in and escaped my notice. Further reflection, however, convinced me that this opinion was probably an error, and that there was a hypostatic congestion with bronchitis.

The patient's strength steadily waned, and the following evening death closed her struggles. She and I were both handicapped throughout, as she had good no nursing, but was dependent upon the tender (?) mercies of indifferent neighbors. So far as possible, nevertheless, the treatment was supporting and antirheumatic, although in combating the rheumatism with potassium salts and salicylate of sodium I had to exercise caution for fear of depressing the already weakened heart. Death took place from exhaustion.

A few more words and I shall have finished. The chief symptom complained of was in the præcordia and between the shoulders behind. This was probably due directly to the acute pericarditis which the autopsy showed had been limited to a small area on the anterior surface of the left ventricle just below the origin of the aorta, and to the posterior aspect of the left auricle, which latter situation, it seems to me, would account for the interscapular pain. Since the necropsy revealed no cause for the epigastric pain and tenderness, it is reasonable to assume that these were reflected. I have since found a statement in Ziemssen's Cyclopædia to the effect that this epigastric pain and tenderness on external pressure is not an uncommon occurrence in pericarditis.

I, of course, suspected the existence of pericardial effusion, but did not at any time demonstrate its existence to my satisfaction, because owing to the denudation of the heart already present, it did not influence the area of cardiac dullness and did not abolish the friction sounds, as I expected an effusion would do. I have since learned that, according to CEUKA, as stated by BAUER in Ziemssen's Cyclopædia, friction sounds have been audible even when the pericardium held a quart of fluid.

Within the left pleural cavity were, as was estimated, eight or ten ounces of serous fluid which I had not diagnosticated. Under favorable conditions this small quantity of liquid ought to be discovered, but in this case the conditions were complex and so modified physical signs as to mislead me. Had the layer of fluid been of sufficient depth to intercept the sound waves, on their passage through the pleural cavity, the complete or partial suppression of the respiratory and vocal sounds would have revealed the presence of the effusion. In reality, however, the hypostatic congestion, discovered post-mortem, together with the comparative condensation of the lungs, occasioned by the enlarged heart and effusion, produced a condition calculated to intensify the transmission of sound waves instead of deadening them. Hence the distinctness with which I heard the râles, the voice and breath sounds, although, owing to the loud, harsh systolic murmur, I could not determine the quality of the respiration. The same intensity with which the mitral bruit was transmitted still further served to mislead me. Yet, it may be asked if the effusion was so slight, how could it give rise to a tympanitic percussion note above the level of the fluid? In fact, this sign in conjunction with the consolidation below, as I supposed, was very puzzling to me at the time. Reflection, however, enables me to explain it, I think. Tympany above the level of an effusion is explained by GERHARDT as being due to the relaxation of the lungs caused by the pressure of the fluid. In other words, the normal tension of the lung is lost. In this case, whereas the effusion alone may not have sufficed to occasion material relaxation of the lung, it was assisted to this end by the pressure of the heart in front, which, as shown by the autopsy, had crowded aside the anterior border of the lung where it had become fixed in its new position. Thus the normal lung tension was overcome.

Whether my failure to recognize the pleuritic effusion intra vitam can be excused on the ground of the complexity of the conditions present or not, it has proved a most salutary lesson to me; and it was in the hope that others might perchance profit by it, that I have ventured to trespass so long upon your time and attention.

POST-MORTEM NOTES.

Family prejudice prevented a thorough examination.

Heart.—There was about four ounces of clear, reddish serous fluid in the cavity of the pericardium (quantity estimated). The parietal

layer of the pericardium was throughout its extent very greatly thickened and covered with projections and folds of fibrinous deposit, disposed in somewhat parallel ridges, running irregularly in direction, and most markedly present over the anterior and posterior surfaces of the sac; these areas corresponding in situation to similar ones in the visceral layer of the heart. Their appearance was partly villous and partly velvety. The visceral layer of the pericardium was also involved throughout its entire extent. The fibrinous deposit was thickest over the anterior surface of the heart, where it was thrown into folds and ridges whose general direction was at right angles to a line passing from base to apex of the heart. Many of these ridges were from two to three-sixteenths of an inch in height, and they were most abundant and largest about the middle of the anterior surface of the heart.

Over the posterior surface of the heart the fibrinous layer is, upon the whole, much thinner, but the projections are more distinctly villous, many being, in fact, severed bands of adhesion, and the general appearance somewhat reticulated.

On the anterior surface of the heart, immediately below the line of aortic valves, there was a recent circular adhesion, one inch and a quarter in diameter, soft and easily separated.

Over the posterior surface of the left auricle the inflammatory process was evidently quite recent. Immediately above this spot the pleural surfaces were involved, and there was a small area just there of pleural adhesion.

The position of the heart was such that the right border lay transversely and the apex was three inches to the left of the median line. The heart had completely displaced that part of the lung which lies in front of the heart. The auricles of the heart were filled with dark firm clots, and the ventricles were approximately empty.

The endocardium of the left ventricle was of a dull, turbid, grayish color, mottled with occasional small, yellowish-gray points, but smooth and glistening.

There were vegetations upon the aortic valves disposed in a highly characteristic manner. Just below each corpus aurantii there were knots or clumps of vegetation about the eighth of an inch in diameter and height, somewhat pyramidal in form, and extending in a crescentic line from these points; along the so-called line of contact of the valves was a clearly marked row of smaller vegetations. The vegetations were most abundant on those segments of the valves which are opposite the point of origin of the coronary arteries. There were a few very small patches of fibrous tissue at the base of the aorta.

The anterior segment of the mitral valve was markedly thickened throughout its extent, and it was also moderately contracted. The posterior segment was similarly thickened and so adherent to the contiguous ventricular wall that only about one-fourth of an inch of its lower border was free. The edges of both segments were about one-eighth of an inch thick and studded with vegetations which had a distinctly granular appearance and feeling. The result of the contraction of the segments was a moderate stenosis of the orifice. The left auricle was greatly dilated and its endocardium thickened and studded with small irregularly-shaped fibrous patches. Its color was a turbid, yellowish gray.

The muscular tissue of the heart was dull, pale and flaccid. The thickness of the wall of the left ventricle (muscular tissue alone) was one-half inch. The heart measured 5¼ by 5 inches, and weighed 1 pound 2 ounces (avoirdupois). There was a moderate dilatation of the ventricles, but the enlargement of the organ was more of the nature of an hypertrophy than a dilatation. Except as mentioned, the changes in the heart were not of special pathological interest.

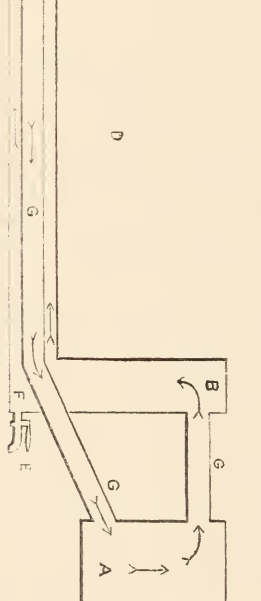
Lungs.—There is a fluid in the left pleural cavity reaching, as the body lies, in the dorsal decubitus, to the anterior axillary line. This fluid was not measured but was approximately eight to ten ounces, clear and slightly reddish. The lower border of the upper lobe of the left lung correspond anteriorly to the third rib and was adherent. This line of adhesion, as well as a few others over the surface of the lung, was not of very recent origin, but yet was easily broken down. That part of the pleural surface, however, immediately next the base of the heart was very firmly adherent. In this lower part of the left lung there was a moderate degree and amount of hypostatic hyperæmia and œdema. There were a few old and moderately firm adhesions over the right lung. The spleen was of less than normal size and soft and degenerated. The liver was rather pale but in a state of moderate passive hyperæmia. There were a few very thin and not very recent bands of adhesion between its left lobe and the diaphragm. The other organs were not examined.

The diagnosis, limited to the organs examined, was: chronic pericarditis, serofibrosa, and endocarditis with recent acute exacerbations of both, with effusion, chronic myocarditis, and chronic and acute circumscribed pleuritis of the left side with effusion and pulmonary hyperæmia and œdema; chronic pleuritis of the right side: circumscribed peritonitis (diaphragmatic), subacute splenitis, passive hyperæmia of the liver.

A COUVEUSE, OR WARMING CRIB.*

BY DR. JOHN BARTLETT, CHICAGO, ILL.

This crib consists of an outer case of galvanized iron, or preferably of copper, and an inner smaller one. Between the two cases is the water area, closed in all around. Standing off some inches from the outer box is a small boiler connected by tubes with the water-space. The upper tube terminates immediately after entering the water-area. The lower one extends through the lower portion of the water-space, to end near the opposite side of the box. This is necessary in order to form an effective thermo-syphon by means of which circulation of the water in the water-space may be maintained, and thus an equable temperature of all parts of the crib.



WARMING CRIB.

A—boiler; B—water-space; CC—thermo-syphon tubes; D—cradle-space; E—inlet; F—outlet; G—water-gauge;—H—safety-vent; K—thermometer-frame, with cup at "L."

MEASUREMENTS FOR SMALLER CRIB RECOMMENDED,

Outside measurement of crib (the figures have reference to the metal case), 26x26 inches; outside depth 11½ inches; size of cradle space, 21x21 inches; depth of cradle-space, 9 inches; width of water space 2½ inches; boiler, 5 inches in diameter, and 7½ inches long. Pipes, 1½ inches in diameter. Safety-vent, 1½ inches at top; at bottom, 1⅝ inches. Capacity of water-space, 12 gallons. Distance of the boiler from the crib wall, 5 inches.

MEASUREMENTS OF THE LARGER CRIB EXHIBITED.

Outside measurement, 30x32 inches; outside depth, 1- inches; size of cradle-space, 22x24 inches; depth of cradle-space, 10 inches; width of water-space, 4 inches. Boiler, 5 inches in diameter, 9½ inches long. Pipes, 1¼ inches in diameter. Safety-vent, 1¼ inches at the top, at bottom, 1⅞ inches. Capacity of water-space, 30 gallons. Distance of the boiler from the crib wall, 5 inches.

NOTE.—In arranging the bottom board and castors the carpenter should see to it, that the boiler stands at the proper height to accomodate the lamp to be used. The "Florence Lamp" renders good service.

Leakage into the cradle-space might prove fatal to the occupant. Against such an accident a safety vent is provided. A conical tube is set, with the larger orifice downward, in the bottom of the crib-space. To prevent the ingress of cold air it is packed lightly with absorbent cotton. If water gets into the cradle-space it would run into the vent, wet the cotton, and cause it to fall out of the tube, leaving this free to act as a drain.

One of the necessary attachments to such an apparatus is a thermometer frame. To determine the temperature of the water by the thermometer, without this attachment, is very unsatisfactory. The column of mercury falls so rapidly upon removing the instrument from the water that it is impossible in this way to read the temperature accurately. To obviate this difficulty, the expedient has been resorted to of placing the thermometer in a frame-work of metal, so that the bulb and lower part of the stem of the instrument rest in a cup. When the frame and thermometer are removed the hot water brought up in the cup causes the mercury to retain its level and it may be easily noted.

It is desirable to encase the metal box with wood, both to retain the heat and secure additional strength. The metal walls are not strong enough properly to sustain the pressure of a column of water ten inches high. They bulge in all directions, indicating considerable strain at their seams. The upward pressure on the bottom of cradle-space in this incubator is 200 pounds. The outer bottom and sides are therefore sustained by boards, and upward pressure upon the cradle-space is opposed by wooden standards, resting upon the ends of cross strips fitted to this bottom and held down by slats crossing from side to side over the top of the box.

To use the apparatus, the water-space is filled with warm water, preferably by means of rubber tubing, and the lamp lighted. The water is never changed, and no attention is required further than to so adjust the wick of the lamp as to maintain the bed of the infant at the temperature desired. With a little practice the flame of the lamp can be so adjusted by th

* Presented at a meeting of the Chicago Medical Journal.

eye, and the temperature of the incubator wall so estimated by the hand, that it will hardly be found necessary to consult the thermometer. A given temperature of the infant's bed may be maintained within a few degrees with very little trouble. The volume of water is so large that variations of temperature of the room, or in the amount of heat applied, are slow to induce a change in the temperature of the bed. In this one a temperature of 92 degrees was generally maintained. It varied between 92 and 86 degrees. It was gradually allowed to fall to the latter point during a number of days preceding the final removal of the infant from the cradle. A temperature of 122 degrees in the water indicated 92 degrees in the bed; the air of the room being at 70 degrees. The gas stove or lamp used under the boiler should be capable of furnishing an abundance of heat; for the large crib here shown a coal-oil lamp with a four-inch wick was amply sufficient. It is convenient to have two of these lamps, so that one may always be ready when needed. The bed is probably best made of horse hair or cotton; it fills up about one-half the cradle-space. The babe, dressed as usual, is covered by a woolen cloth, and over this rests a blanket sufficiently large to cover the whole top of the incubator, and thus to roof in the cradle-space, except about the face of the infant.

The incubator may be emptied of water by means of tubing attached to the discharge cock.

PARACOTO IN DYSENTERY.

BY R. G. WITHERSPOON, M. D., HOLLAND'S STORE, S. C.

E. Y., age two years, had been ill of dysentery for four days. I was called at night, June 5th. Found her in convulsions; had her placed in the warm bath, cold applied to the head and gave an enema of warm water, which was retained only a short time. Convulsions recurred about every hour, bowels moving, tormina and bloody mucous discharges, every half hour. Gave calomel and ipecac, and every third hour administered rectal injections of half pint of saturated solution alum in cold water every two hours.

8 A. M., June 6th. Found her almost in state of collapse—skin cool, face pale, very restless, and constant discharge of dark-green matter from bowels. Gave injection of 20 grains of ipecac in half pint of cold water, after which there was a copious discharge of green matter followed by blood, mucus, etc.

8 P. M. Found her in very much the same condition; stupor however, had supervened, after restlessness; contracted pupils, bowels still acting and very watery. Gave fluid extract paracoto, ten drops, every four hours.

8 A. M. June 7th. Found patient playing with her dolls; warmer, and bowels under better control.

June 8th., 8 A. M. Find her still improving; convalescent. Continue the paracoto 3 times a day. The case progressed favorably, and at end of two weeks the child was well and hearty.

Fred. T., aged two years. Fell ill June 2nd, I was called on the fourth and found him in very much same condition as previous patient, minus the convulsions.

He had the characteristic dysenteric discharges. Treatment was very much the same as in previous case—injections, ipecac, bismuth, opium in form of paregoric, calomel, quinine, etc. He was relieved of the urgent symptoms in a few days, but diarrhœal, and at times dysenteric discharges continued. I prescribed fl. ext. paracoto, but it could not be had before the little boy went into a condition of marasmus. He died at the end of four weeks of inanition. I believe had it been possible to have procured a reliable preparation of paracoto after the first storm of dysentery had subsided, its tonic and astringent properties would have so relieved the excessive discharges and toned up the digestive system that the result would have been a cure.

NORMAL LIQUID ERGOT IN A CASE OF SECONDARY UTERINE HÆMORRHAGE.

BY J. L. FURBER, M. D., TOPEKA, KANSAS.

Case 1.—Patient an exceedingly delicate lady 25 years old, of large brain, fine accomplishments, and sublime courage, whom I had delivered five weeks ago of her first-born babe. While extinguishing a fire in her house that had caught from a gasoline stove, she was so severely shocked that the surface of her body and her limbs became as cold as clay, and her uterus became so suffused and engorged with blood that by the time I reached her bedside five hours later) the womb was as large as a quart mug, and she was flowing profusely. Normal liquid ergot in half-teaspoonful (30 drops) doses was given every four hours to compel the womb to express the blood not only from its cavity, but also from its body, for I thought the walls of the womb were fully two inches thich. Between the doses of ergot every four hours salicin, 5 grains, to cool down the great heat of the womb, and gallic acid, 5 grains, as a styptic, were given, and the hemorrhage was speedily arrested. Within forty-eight hours, the womb had contracted down to its normal size, and the patient would have sat up had I permitted it.

The stomach of this patient was always irritable, and in her labor had rejected Squibb's fluid extract ergot, which has always been a favorite preparation with me, but the normal liquid ergot did not nauseate the patient, and acted as promptly, specifically and positively as I could desire.

ALOPECIA ADNATA.

BY ARTHUR WHITE, M. D., ROCKPORT, IND.

We have in our vicinity several cases of congenital baldness in the family of a thrifty farmer. The family is among the pioneer families of Indiana, and, so far as can be traced, the disease first appeared in the present family; though he had several brothers and sisters, they, as well as his parents, had the usual growth of hair. In the present case the hair has never grown, except in a rudimentary form, upon the head and other parts of the body. This gentleman has been twice married, and is the father of twelve children. His first wife bore him six children; three of them, two sons and a daughter, who are now grown, are destitute of hair. The mother had a feeble constitution, and finally died of phthisis pulmonalisis. His second wife is a woman of more than usually robust physique, with a heavy suit of hair; she is also the mother of six children, but only one of them survives. They all possessed the usual amount of hair. Perhaps in this latter marriage, in the vegetative process, the stronger constitution overcame the weaker. We look forward with interest as to whether the disease will appear in the third generation.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, June 20, 1887.

The President, W. T. BELFIELD, M. D., in the chair.

DR. HAROLD N. MOYER and DR. ALFRED HINDE presented a paper on

"PERIODICALLY RECURRING OCULO-MOTOR PARALYSIS,"

with the report of a case.

The patient has suffered from her seventh year with complete paralysis of the third nerve in all its branches. The attacks recurred at varying intervals of from four to six months and were always accompanied by headache and vomiting. The attacks have grown more frequent of late and since the earlier ones, recovery from the paralysis has not been complete.

The literature of the affection was given, and mention made of some sixteen cases so far reported. The etiology, pathology and prognosis also received consideration.

DISCUSSION.

DR. W. F. COLEMAN: This paper is so excellent and unique, I certainly have nothing like it in my own experience to relate. I have perhaps fifteen or twenty text-books in English, German and American, but none of them refer to periodical paralysis of the motor oculi nerve, and I have seen no reference to it in any work on the eye. Isolated paralysis of the whole third nerve, even of organic origin, is a rare affection without involving other cerebral nerves. As the interesting point in the paper is the source and pathology of the disease, I will not undertake to discuss any other point. These cases are more interesting, if possible, to the general practitioner than to the oculist, on account of the connection between cerebro-spinal disease and paralysis of ocular muscles The post-mortem in three cases showed that the nerve trunk was involved, which would point to an organic origin of those cases of periodic motor oculi paralysis, and I suppose in those cases relapses occurred from inflammatory exacerbations. I agree with DR. MOYER that a large majority of the cases related would in all probability be functional. In his own case there were symptoms of migraine, viz., headache and vomiting accompanying the motor oculi paralysis. Organic lesions of the brain, such as basilar meningitis, etc., are in the great majority of cases, say 75 per-cent accompanied by optic neuritis. Since in the sixteen cases related by DR. MOYER there is no mention, I believe, of optic neuritis I infer the motor oculi paralysis was not due to organic disease of the brain, but to functional causes.

DR. C. F. SINCLAIR: It has never been my experience to have met with a case precisely similar to that to which DR. MOYER has referred. neither have I met with one in my reading. But it seems to me from the number of cases to which he refers, all with symptoms resembling one another in one or more particulars, and in all of which was found the element of periodicity, that we have almost data for the establishment of a new and definite pathological condition which would lead the way to very broad investigation in ophthalmic science. The paper is particularly interesting to me because one case to which reference has been made resembles in a very great degree one which came under my observation some weeks ago. It was a case of paresis of only one of the branches of the oculi-motor nerve, but it was sufficiently marked to cause a high degree of ptosis. The element of periodicity was present in this case, and that I take it, is the peculiar feature in the cases cited by DR. MOYER. In the case to which I refer were associated with the paresis other peculiar and morbid conditions. My patient was a young woman, 17 years of age, of German parentage. When I first saw her I noticed at once a peculiar expression of the eyes, which I found came from the fact that one was a light, almost sky blue, and the other gray. She told me that three years previous both of her eyes had been dark brown and that two years ago the left eye began to grow lighter in color, changing to a light gray. That is a phenomenon

which I must confess never to have heard of before, where the pigment in the eye of a person of that age has undergone such marked changes within a period of three years without any evidence of iritic inflammation to account for them. DR. MOYER, I believe, mentions a case where this oculi-motor paralysis had occurred in the spring successively on several different occasions. The attacks which my patient suffered occurred also in the spring, coming on each time in the same month and nearly the same day. When she came under my care she was suffering the third attack, which was precisely similar in every respect to the two preceding. There were several days of extreme langour and drowsiness, during which time there was an irresistible impulse to cry on the slightest occasion. Then followed the ptosis, accompanied with severe neuralgic pain through the temple and over the vertex on one side, and at the same time a small infiltrated ulcer made its appearance on the lower margin of the cornea. The usual local means I found entirely unavailing in checking the attack. This case suggested to my mind the possibility and the suggestion has been renewed with added force to-night, that as ophthalmic surgeons we are too apt to dwell solely upon the local manifestations of disease in the arteries, tunics of the eye and its appendages, and to limit our treatment entirely to local treatment. It seems to me that it is time for us to recognize the fact that in many of the morbid conditions of the eye which we have been accustomed to consider as altogether of local origin, the causation lies in reality much deeper, either in the great nerve centers or in diseased conditions of other and perhaps remote organs, and unless we direct our remedial measures to these our results can only be transient and unsatisfactory.

DR. MOYER, in closing the discussion, said: Here, as in similar cases, we need to have an exact definition of what we mean by the term "functional." If we call only those lesions organic in which there is no absolute degeneration or destruction of the nerve cells, and speak of transitory congestion as "functional," then we must all admit that many, perhaps most, of these cases fall within the latter class. But the term used in its strictest sense—that is, in the sense that hysterical or reflex conditions are functional—then the only case so far as our observation extends, ever reported is the one described by JACOBI. Every case of the seventeen so far reported, including our own, has been progressive. The recovery earlier in the disease was complete after each attack. Later a certain smount of paralysis would remain. MOBIUS refers the paralysis to an inflammation or congestion of the nucleus of the nerve, coming on periodically, and which in time results in a certain amount of, or even total paralysis. The anatomical diagnosis is the most interesting feature of the case. We have purposely refrained from offering any theories of our own regarding the probable seat or nature of the difficulty: yet we confess to a strong leaning toward the theory of a nuclear degenerative process. As DR. COLEMAN has pointedly said, this disease is not associated with any change in the retina or optic disc, which rather militates against the theory of a basilar meningitis as the basic pathological condition. We must, however, admit that the two earliest cases that came to a post-mortem examination were basilar in their nature, and in the third an enchondroma had impaired the integrity of the nerve.

Report:

"CANCER OF THE TESTICLE, WITH SECONDARY PLEURISY,"

with exhibition of pathological specimens, by DR. JOHN A. ROBINSON.

The subject from which this specimen was obtained was a Frenchman, aged about twenty-four years, who was admitted to the Cook County Hospital May 1st, for a tumor of the left testicle, pronounced sarcoma, of eleven months' standing. An operation was advised and refused, the patient leaving the hospital. A few days ago he returned with all the signs and symptoms of effusion in the left pleural cavity. The symptoms were so severe that I ordered him to be aspirated, and remarked that the product of aspiration would undoubtedly be bloody serum. So it was. The patient lived only a few hours, and the autopsy demonstrated that there was a large cancerous tumor, six inches in diameter, in the scrotum involving the left testicle: also, a tumor nearly as large in the abdominal cavity, with secondary cancerous deposits over the pleuræ of both lungs at the apices.

The symptoms of cancer of the pleura are always obscure, unless we have the history of primary cancer in some other part of the body. This is the fourth case of pleural cancer I have seen, the cause in these cases being respectively cancer of the kidney, as diagnosticated by DR. FENGER, cancer of the humerus, cancer of the liver, and the present case of cancer of the testicle.

The exudation in cancerous pleurisy is serum mixed with blood and tissue detritus, if the cancer granulations are degenerating. I believe the bloody serum is almost pathognomonic of cancer, as about the only diseases in which we obtain such a fluid on aspiration is in pernicious, or malarial, anæmia, phthisis and purpura, and even in these diseases the exudation is more likely to be purulent.

Two causes for the hæmorrhagic effusion have been assigned:

1. The effusion is the result of the breaking down of the cancerous granulations.

2. It is the result of the cancerous cachexia, where the blood is impoverished, the absorbent vessels weak and osmosis very rapid.

I am inclined to believe the infusion is due to inflammation produced by the presence of these foreign bodies — the granulations — and the breaking down of these granulations.

REMARKS.

These cases teach me this lesson: that oftentimes patients who suffer from cancer of some portion of the body amenable to treatment, frequently die of secondary cancer of the pleura, which might have been averted had the primarily diseased tissue been entirely removed. This is certainly true of many cases of cancer of the genital organs, breast, bones, etc.

The specimens were then exhibited. They consisted of the original cancerous tumor of the testicle, the collapsed left lung, whose pleural surface was thickly covered by the reddish exudate, and the right lung, in the apex of which was a cancerous growth one and a half inches in diameter.

DISCUSSION.

DR. H. A. JOHNSON: Cancer of the lungs occurs primarily but very rarely. I have seen two cases. Recently I saw a case which I supposed to be cancer of the lung in which there was primary cancer of the larynx. It was interesting as the only case I have seen where cancer of the larynx has been followed by secondary cancer.

DR. ROBERT BABCOCK: I am particularly interested in the case just mentioned, especially in that part pertaining to cancer of the pleura. I was reminded of a case that it was my good fortune to see in Munich, by the remark that serum mixed with blood is almost pathognomonic of cancer of the pleura. In the hospital in charge of VON ZIEMSSEN was a man who had been in several hospitals, and in whom BAMBERGER, in Vienna, had diagnosticated cancer with pleurisy of the left side. The same diagnosis was made by VON ZIEMSSEN and his assistant. I examined the case, and although I do not remember all the signs present, I remember being struck with the extreme flatness over all the left side, the absence of respiratory sounds, the resistance of the side. The assistant informed me he had been tapped and a bloody discharge obtained, which seemed to confirm the diagnosis. A day or two previous to my leaving Munich I inquired about this case. The man had died, and they found no cancer whatever, but a remarkable thickened condition of the pleuræ; the fibrinous deposit having become very highly organized. It was the oozing from the blood vessels which were severed in the tapping which had given the bloody discharge, and misled such celebrated men as BAMBERGER and VON ZIEMSSEN.

DR. ELBERT WING: I do not know of a case that is similar to this, but I remember a case which I saw diagnosticated by the late PROF. FRERICHS of sarcoma of the lung, primary. The symptoms were those of severe, acute lancinating pain, and rapid development of the tumor, with no family history showing what the lesion might be. The physical signs were those of consolidation at the right apex. Everything else being excluded in the diagnosis, PROF. FRERICHS said it was either a carcinoma or a sarcoma, and that as sarcoma of the lung was more common he presumed it was sarcoma. After a post-mortem microscopical examination PROF. FRERICHS' assistant said it was a case of sarcoma. PROF. VIRCHOW'S assistant said that it was carcinoma. It was probably one of those cases that are right on the border-line between the two tumors, viz., sarcoma-carcinomatodes, and the examination was not complete. In regard to the bloody effusion, or fluid, in the pleural cavity, I happened to hear PROF. FRERICHS say that he always regarded that as an indication of tubercular pleuritis.

DR. FRANK BILLINGS: The only thing of interest I have to offer is in regard to the color of the serum. PROFS. NOTHNAEGEL, BAMBERGER, and KUNDRAT, of Vienna, teach that bloody serum in any serous sac is due to (1), a malignant growth-carcinoma,—sarcoma, etc, (2), tuberculosis, and (3), to poisons that cause fatty degeneration of the walls of blood vessels and consequent capillary hæmorrhage (phosphorus).

The presence of the bacillus tuberculosis would easily differentiate the first two causes, if the growth in the lung were primary carcinoma. The last cause would hardly be mistaken for the first two.

DR. J. J. M. ANGEAR: As far as my observation goes, cancer of the pleura has always been secondary. I have seen cases of secondary cancer, not only of the pleura, but the sub-serous tissue of the pleura, the connective tissue around the base of the heart infiltrated with malignant growth, as well as the substance of the lungs. Bloody serum comes from extreme passive congestion—impoverished condition of the blood, as well as from the breaking down of the cancerous growth. Our knowledge of the primary cancer aids us greatly in recognizing the cachexia. Taking these two things together with a bloody serum in the pleura, the diagnosis of secondary cancer of the pleura becomes simple.

DR. JOHN A. ROBINSON, in closing the discussion, said: The diagnosis of cancer was simply suggested to me by the nature of the tumor, the slow growth, and the amount of pain the patient had, etc., and finally the character of the effusion. The question that puzzles me most is, whether, when aspirating a patient we get this reddish fluid, it is not a pathognomic sign of cancer. It has been my good

fortune to have had an extended experience in the aspiration of a large number of patients, tubercular and otherwise, and in cases where I obtained well-marked physical signs of tuberculosis (it was before we examined for bacilli) never have I obtained this reddish fluid, and in all cases of cancer which I have aspirated I have obtained this reddish fluid. It was the same color each time. I am groping about for an opinion, but would not say positively that when we get that kind of fluid the patient has cancer.

DR. F. C. HOTZ read a paper entitled

THREE CASES OF SYMPATHETIC OPHTHALMIA ARRESTED BY EARLY ENUCLEATION OF THE INJURED EYE.

(which will be published in later issue.)

DR. CHARLES T. PARKES reported two cases of

EXCISION OF CERVICAL GLANDS.

One was a child five years of age ; the other in a child of twelve. In the first case the mass was on the right side, the glands extending from the ear to the clavicle, there was no portion of the neck unoccupied by more or less of these glands In the boy of twelve it was even worse, as the glands extended beyond the midline of the neck posteriorly. The trachea was carried two inches to the right of the midline by these tumors. They interfered with inspiration, and failing to influence them by medical treatment they were subjected to operation and the glands all removed. I have seventy-five of these glands which were removed from the boy of twelve years. As far as the removal of the cervical gland is concerned, it is a very simple operation to remove one gland if it is superficially situated, but when the deeper layer of glands are implicated, glands that are as extensive as these were, it makes a formidable operation. In the latter operation there was not a blood vessel or a nerve in the neck below the parotid gland that could not be seen. It was a very extensive operation, the most formidable that I ever attempted to do in anything of this kind. The child lost a good deal of blood, notwithstanding the greatest of care. In both cases, after the first incision, the knife was laid aside and not used at all unless necessary. The incision was made over the most prominent part of the tumor and the mass laid open to view at once; subsequently the tumors were removed by scissors, keeping close to the growth. It is a very easy thing to remove a superficial tumor, but it is difficult to safely remove these deeper tumors, as they lie along the deeper vessels and in no instance should any tension be made on the tumor. The capsule should be exposed to view and the tumor picked out of its bed slowly, DR. VAN BUREN, in his late "Surgery," in the chapter on hæmorrhage, gives a graphic description of the terrors a young man got into by pulling upon one of these tumors and touching the knife to it while tense. The first case I operated upon early in March; the boy recovered without any difficulty whatever.

DR. CHRISTIAN FENGER: In connection with the extirpation of glands of the neck I wish to make a few remarks, and show a patient. It is not exactly because this is a case of the same character as DR. PARKE'S, but it is more to point out the limits of the possibility of operation on the neck. This case is one of

SECONDARY CARCINOMA FROM CANCER OF THE LOWER LIP

which was removed in December, 1884. In April, 1885, he came to me with enlarged glands on both sides of the neck and no relapse *in loco*, consequently no tumor on the lip. Those glands were removed on both sides in the carotid triangle. On the right side there was invasion of the facial vein with a thrombus about half an inch long; consequently that vein was ligated below the thrombus, between the thrombus and the jugular, before removing the tumor. The invasion of a vein by any of the malignant tumors is a very grave complication, as we always expect a relapse. In May, 1886, there was a tumor felt on the right side, the same side on which the facial vein had been invaded This tumor was about the size of a walnut when I removed it. It is natural that I should consider the case to be a hopeless one as far as relapse is concerned, even after primary healing of the wounds ; but to my astonishment, the patient is well and there is no relapse anywhere. The neck is everywhere perfectly free, and it is one year since the last operation. Before the beginning of the second year after an operation for carcinoma most of them have relapsed; according to the statistics of VON WINIWATER, 82 per cent. relapse within the first quarter of the year, the relapses getting very rare in the second year. Thus, when there is no relapse at the end of one year, we commence to consider the patient safe. When we have to deal with malignant tumors on the neck there is a certain limit to operating which we cannot very well pass over.

I will show a photograph of another case which represents the other side of the limit. It was a carcinoma, not secondary, but primary, in the lymph glands of the carotid triangle, or perhaps an alveolar sarcoma; I was not able to make a diagnosis. The tumor was in the carotid region and was about the size of an orange, somewhat moveable from side to side, and not from above downwards. In these tumors there is a certain amount of immobility that will decide the surgeon beforehand to decline operating. But the amount of immobility is somewhat disputed, as KONIG and FRIEDEL and

others who have written monographs on operations in the neck state that, even if we have a tumor that feels rather immobile, we find that when we get down more and more, the tumor that seemed immovable from the beginning gets more moveable and finally can be got out. In the extirpation of this tumor not only the jugular vein was invaded (it was ligated double and removed), but the sheath of the common carotid artery was invaded. There was no carcinomatous tissue, however, in the wall of the artery itself. You will remember that the artery has a sheath separate from the common sheath, around the artery and the vein. The artery was laid bare to the extent of over an inch on its outward surface. The patient had on the third day a slight hæmorrhage, which was not reported, as it was thought it was unimportant, and five or six hours afterwards he had a final hæmorrhage which took only about a minute. The microscopic examination of the wall of the carotid showed that there was no invasion of carcinoma tissue, but near to the place where the tumor had invaded the sheath there was an island of granulation issue in the intima, and this was the place where the artery ruptured. As to the limits of the possibility of operating, I should put it where the malignant tumor has passed through the vein (which we can always remove with safety, providing we keep our wounds aseptic) and into the sheath of the artery. Here we meet with the danger of secondary hæmorrhage, and have to resort to ligature of the common carotid, which in itself is a dangerous operation.

DR. C. T. PARKES: It has been said with reference to these cervical glands, by a surgeon of good reputation, that it is always proper to do a surgical operation on them, because if you take out a few of the big ones the little ones get frightened and go away. That has not been my experience; unless you get out all of the chain of glands that are implicated, the smaller ones are sure to enlarge rapidly soon after the operation. I have several cases in my notebook, one an old man on whom I operated about six months ago. The tumor was of immense size. It was sarcomatous, and among other tissues the glosso pharyngeal nerve was divided, the digastricus muscle was torn off, and the lower half of the parotid gland removed under the supposition that it was a part of the tumor, and the facial nerve partly divided. That man recovered. It is not an unusual thing for a patient to recover from these operations on tumors in the neck. It is my belief that a surgeon is not justified in operating on any of them where it is a malignant growth, or of such degree of malignancy that all the tissues are implicated in it, where the mass is fixed and immovable, because the patient will die either from the operation or the action of the disease. If the attachments of the tumor can be pretty well defined, although immovable, certainly if free and encapsulated, it makes very little difference, because the records show that nearly all the important tissues of the neck have been divided in these operations, sections of veins, arteries and nerves made, without death following. The cases related were merely instances of cervical glands.

Correspondence.

A SINGULAR CASE.

March 30, 1887, I was called to see Mrs. R. T., aged 38. On arriving at her house I found her up but complaining of pain in the region of the kidneys, and also distress in the stomach. She said she had been failing gradually for three months: the menstrual flow had not appeared at the last epoch. I suspected pregnancy, but she and her husband thought not. I gave some diuretic medicine and pepsin. Was called again in two days, and found her in bed, suffering from nausea; trying to vomit very frequently, but ejecting very little. Appetite not good, bowels constipated, very little elevation of temperature. Gave bismuth sub. nit. with morphine for several days, but could not control the vomiting fully. Tried acid. carbolic with iodine tincture; also quassia, muriatic acid, Fowler's solution, calomel and oxalate cerium, but still the vomiting was incessant.

About three weeks had now passed, and DR. GRIM was called in consultation (I being a young practitioner). The doctor's first observation was, "I suspect pregnancy." I told him the parties concerned said they knew that was not the case. The doctor suggested I continue the same treatment which I did with tonic doses of quinine and columbo. I continued to treat her until May 8th, when, at the request of the husband, the case was passed into the hands of DR. GRIM, who, on his second visit, discovered a pulsating tumor in the left hypochondriac region, which he diagnosed as aneurism of the abdominal aorta. He succeeded in controlling the vomiting to a great extent with cerium oxalate, but the bowels were terribly constipated—only moved after using an enemata. The patient was all the time growing weaker, and death was expected hourly.

About May 27 DR. DONNELL was called, and being informed by the husband, I went to the consultation. The doctor, after a thorough examination, told us he was undecided as to whether it was aneurism or cancer of the pancreas, but he thought she would live but a few hours. But from some cause she began steadily to improve, and kept gaining flesh and strength until she was up and about her household duties. On the evening of the 13th of July the husband came running for me, saying there

was something wrong with his wife, and he thought she was going to miscarry. I was at the house in a few minutes and found her resting quietly, but she said something came away from her while she was at supper or just after she got to the bed, which we found to be a fetus about six inches long and would have weighed six or seven ounces. I removed the placenta, left antiseptic washes, and left her comfortable. She has been doing very well up to this time, July 19, but the pulsating tumor is still plainly felt. I should have said she is the mother of two children by a former husband; the last was born about twelve years ago. What is the pulsating tumor? What caused the death of the fœtus? Have any of your readers had any similar cases?

O. B. SURFACE, M. D.

The Chicago Inter-Ocean, during the late meeting of the American Medical Association, said with equal truth and justice in an editorial:

"There is no one who knows better than the family physician the heart of society. Hidden though it be from others it is revealed to him. The curtains of mystery are drawn aside, the doors of secresy are opened, and he looks in where shame, or misery, or wretchedness, or unhappiness lies crouching, and while administering to the health of the body it is often his duty to prescribe for the ills of the mind. He is the one man among men who may be freely and trustingly approached by those who would shrink from the tender sympathies of loved ones, or would fear to test the benevolence of the priest; and whether he is austere and exacting or sympathetic and tolerant, the erring and troubled go to him with confidence. . . . This relation of the physician to society is at once beautiful and awe-inspiring. It is beautiful in that it shows the highest development of personal and of professional integrity; it is awesome in that it acquaints us how much the safety and well-being of society depends upon the discretion and honor of a comparatively small body of men. It never occurs to any one to question either the moral judgment or rectitude of these men, in every way as other men save for the profession they represent; and yet there have been few instances of a physician in regular standing making use of any confidence reposed in him to advance his own interests or to work harm to the interests of others. To such perfection have the ethics of the medical profession been brought that the law itself respects and sanctions the inviolability of the physician's trust, even in cases where important benefit might come to the state through the testimony he might give. A physician who will refuse to give evidence respecting matters that come under his professional notice, may not be committed for contempt as might another inflexible witness, a forbearance on the part of the law that is directly complimentary to the stand taken by physicians of their own motion."

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JULY 25, 1887.

Editorial.

HYDROPHOBIA.

The occurrence of two fatal cases of hydrophobia in this city during the present season, has vested this disease with peculiar local interest. Unfortunately the dogs inflicting the bites escaped immediately after, in each instance, and were not kept under that surveillance which is essential to make such cases as valuable in the study of the disease, as they should be in order to the shedding of any additional light thereon. The symptoms, too, have as yet been reported only through the public press, and the imagination of the sensational reporter has, doubtless, imparted to the detail not a little fictitious coloring. The fact that death ensued in each instance is, indeed, the only positive assurance we have that the disease was genuine hydrophobia. Unquestionably, with the rarest possible exceptions, the cases of reported hydrophobia which are from time to time published as terminating in recovery, are not hydrophobia at all, but are cases of hysteria superinduced by the influence of the imagination on the nervous system. In our own experience we have had cases in which it required the combined effect of the physician's assurance and the exercise of the utmost self-control on the part of the patient, to prevent an explosion of nervous symptoms which, taken in connection with the history of the bite of a dog, would have been taken for manifestations of hydrophobia. So closely, indeed, may hysterical symptoms simulate those of hydrophobia, that, in the event of recovery, the fact that the dog died of rabies is necessary to establish any given case as one of hydrophobia.

Hydrophobia is emphatically a *bête noir* of medicine, and unless the experiments of Pasteur have discovered a remedy, the profession have probably nothing in their hands which affords the least hope against the disease, when its virus has permeated the system. It is true the exhibition of certain drugs has been claimed to prevent and even cure the disease, and prominent among these are curare, calabar

bean and hoang-nan. But while it is the duty of the physician to resort to these, it should not be forgotten in estimating their value, as prophylactics at least, that at least two-thirds of those who are bitten by dogs suffering from rabies escape the disease. This is due either to the fact that the clothing through which the bite is inflicted intercepts the virus, or to individual insusceptibility on the part of the bitten. Curare may be given in commencing doses of $\frac{1}{16}$ to $\frac{1}{4}$ grain and gradually increased with the tolerance manifested by the system. This tolerance is sometimes very great and a half grain of the drug has been repeated every half hour before the characteristic muscular paralysis caused by the drug has set in. In the event of an excessive quantity being administered, artificial respiration must be resorted to, The reports which accompanied the introduction of hoang-nan from Tonquin would certainly warrant the trial of this drug in a case of genuine hydrophobia, and we are surprised to learn that it was not resorted to in either of the cases recently occurring in this city, where the drug was first introduced to the profession, and where a constant supply of it is on hand. Such cases are emphatically of the kind in which new remedies should be accorded a trial.

The experiments of PASTEUR in connection with the prophylaxis and cure of hydrophobia have been receiving the wrapt attention of the profession for the past few years. The status of the question was recently so admirably set forth in a paper read before the Chicago Medical Society by DR. FRANK BILLINGS that we produce the same in its entirety. We believe the profession will concede the fairness of DR. BILLING'S *resume*

Early in January, 1881, M. PASTEUR first presented to the Académie de Médecin. of Paris his idea that hydrophobia was due to a micro-organism which he called the bacillus lyssæ, and to which he ascribed the phenomena of the disease. Further he said he could inoculate it, and could give immunity to the disease; but he soon had to give up the idea that it was due to that one micro-organism, as it was not long until KOCH disproved it, and showed the bacteriological world that the organism really gave rise to general septic infection. During the next two years M. PASTEUR worked on in his laboratory, and finally gave out that the chief amount of virus, that gives rise to hydrophobia, is to be found in the crebro-spinal system, and if a small amount of cerebro-spinal matter taken from an infected rabbit was injected into other animals by trephining, it produced a like disease, and if that taken from a human was injected into animals it would produce a similar disease. He found that where the injection was made subcutaneously it gave rise to the same sort of symptoms, but required a longer incubation; and that the amount of virus injected was in inverse ratio to the stage of incubation; that is, if a small amount of virus was injected the incubation was longer, and if a large amount the incubation was shorter. He urged the point of what he called a "fixed virus" with an incubation of usually seven days; sometimes it was six, sometimes eight, and sometimes as high as twelve days. The next thing he promulgated was that if he injected this fixed virus into a dog or rabbit, the animal invariably died of the disease he called hydrophobia; and finally, that if he injected the sero-spinal substance which had undergone certain changes by dessication, by which it lost its virulence, that he could protect the animal, making it refractory to the disease he called hydrophobia. He claimed that he had cured fifty dogs by carrying them through certain series of injections to the number of ten. beginning with the weakest cord, and had made them refractory to rabies. In July, 1885, there was presented to him a boy by the name of JOSEF MEISTER who had been bitten in fourteen places by a dog said to be rabid. DRS. VULPIAN and GRANCHER, of Paris, advised that he inoculate the boy, and the boy was put through a series of thirteen inoculations and has never had rabies. In October of the same year, after being successful in this case, M. PASTEUR gave out to the Académie de Médecin that he could prevent all cases of rabies, it did not make any difference what time they had been bitten. As a consequence patients flocked to him from all parts of the world. Not long after that, in 1886, he lost his first patient. He then said that the patients, to be made refractory to rabies, must come to him in thirty-five days after being bitten; and not long after that, again losing patients, he placed the period at fifteen days. At the end of 1886, the Royal House of Vienna gave a certain amount of money to erect a Pasteur Institute at Vienna, and PROF. VON FRISCH, of Vienna, was sent to Paris to study PASTEUR'S methods. He remained there a month and then returned to Vienna, and went through a certain set of experiments such as PASTEUR had followed, but with no satisfactory result. He agreed essentially with M. PASTEUR in most of his conclusions, but he disagreed with him in one essential point; he found that dogs could be made refractory to the rabies of PASTEUR, but that they died promptly when the rabies of the street was injected into them. When PASTEUR heard of this he said at once that M. FRISCH had used the "slow inoculation;" he had just propogated the "rapid inoculation," and he recommended M. FRISCH to try a more rapid procedure. M. FRISCH carried out his experiments according to M. PASTEUR'S instructions, and found that PASTEUR was again mistaken; that dogs made refractory by weaker injections sometimes died of the rabies of PAS-

TEUR, and invariably died when street rabies was injected into them. M. PASTEUR has from the beginning been opposed by a number of medical men. DR. PETER has opposed him strongly; at every opportunity he has arisen in the Académie and opppsed him. When he started out on this rapid inoculation, M. PETER accused him of killing his patients, maintaining that they died of rabies engendered by PASTEUR. M. PASTEUR was supported by VELPEAU and GRANCHER, two well-known professors of Paris, GRANCHER saying, that it was not only a true doctrine, but so true and noble that it must have had a divine origin. The last report of M. PASTEUR was made at the end of the year, December, 1886. The number of persons bitten who have been treated by PASTEUR are 2,682; number of deaths, 31; mortality 1.15 per cent. Persons bitten by animals known to have been rabid, 2,164: deaths, 29; mortality 1.34 per cent. In comparison to that I will give the percentage after M. PASTEUR'S treatment. The mortality, before the anti-rabietic method was used in the department of the Seine, was 160 per annum for 1,000 patients; after the vaccination, 7 for 1,000. Of wolf-bitten patients the mortality has been 82 per cent., as claimed by M. PASTEUR, and as claimed by M. PETER 67 per cent.; after the vaccine treatment 14 per cent. of wolf-bitten patients died. There are certain formulated objections given to M. PASTEUR'S treatment by those who have examined it closely.

First—That the majority of patients treated by him are not bitten by rabid dogs, while PASTEUR affirms that they are. In this country it is interesting to know that the first children sent to Paris have been proven not to have been bitten by a rabid dog, the patients sent from Jersey City; the dog is alive and healthy to-day.

Second—He does not inject a rabietic virus at all.

Third—He makes no control experiments, and never has. If he had placed his patients side by side with those treated by other means he might have proved something by his treatment. He makes contradictory statements. This is seen by reading the reviews of what he has done. He first gave out that he could protect any patient at any time, but he afterwards narrowed it down to fifteen days. There is one unjust accusation made against him—that he is not a scientist. He is not a physician, not a physiologist, not a chemist: but he has done good work in the scientific world. The most important objection made to him is that the rabies he produces is mute; the dogs and rabbits suffer from a mute form of rabies, instead of the convulsive form as seen usually in the human.

Finally, he claims that he finds lesions in the human system; at first he claimed that anyone could see them, and when that was disproved, he claimed that he alone could see them. I cannot, perhaps, in my own words, express an opinion better than was expressed to me the other day by DR. HAY; he said: "PASTEUR manufactured an hypothesis, and he has been trying to prove that hypothesis by alleged facts ever since; but they won't fit, never have, and probably never will." One thing I forgot to state. In France, during the last 27 years preceding 1886, there were an average of thirty patients died each year from hydrophobia, and in 1886 there was just thirty deaths, sixteen that had not been vaccinated. PROF. FRISCH, of Vienna, has cautioned against the use of these inoculations of PASTEUR, claiming that they are really dangerous, and may produce rabies or false rabies in patients. It occurs very often that certain diseases are mistaken for rabies; the most common, perhaps, is septicemia, due to bites of animals, which will give rise to tonic spasms, and consequently is mistaken for hydrophobia. In the dog there are numberless diseases that are mistaken for hydrophobia, and the poor dog is killed when he is suffering from the most common disease of the intestinal tract, of the lungs, or of the brain. It has been my fortune to see three cases of hydrophobia, all of them at the Cook County Hospital. One of them was a boy about ten years old, who was bitten by a dog that was immediately killed. The boy died in the usual length of time. There was one symptom which invariably occurred, and in the three cases that preceded death about four hours; the temperature began to rise, and in every patient my thermometer, measuring 110° F., would not measure the temperature an hour before death, and it remained so an hour after death.

While we believe that the unfavorable, or, rather, unsatisfactory, impression of "Pasteurism," as voiced in the above, is so general in the profession that it will require considerable new light to remove it, it is but just to state that a committee appointed by the British government, and comprising such men as SIR JAMES PAGET, T. LAUDER BRUNTON, SIR JOSEPH LISTER, RICHARD QUAIN and J. BURDON SANDERSON, has reported quite favorably on the method and its prospects. With the endorsement which it has received at such hands, superadded to the favor in which it is held by other prominent contemporaries of the French scientist, the careful physician will be particularly careful not to allow his mind to be prejudiced against it, even though he may not as yet be able to detect the practical good which may come out of it.

Notes.

The British profession are disgruntled at the meagre distribution of titles among their number, on the occasion of their Queen's late jubilee. It seems that no baronetcies were conferred on medical men and only three knighthoods, and one of these was conferred on a horse doctor. The Medical Press and Circular comments thus on the subject: "To us it seems rather a poor reward for a life largely spent in ministering to the sufferings of a gouty aristocracy to receive only a knighthood, and we are almost betrayed into a hope that some sharp in the future will open the eyes of the responsible parties to the enormity of their conduct." Such repining makes the profession of this country blush for shame. The Queen can make a baronet or knight, but it takes Higher Power to make a man, and that Power has evidently not been lavish in that direction among a certain section of the British profession. Physicians who do not hold the titles which they have won more honorable than those which come by the favor of a crowned head, are snobs, and the Queen has shown excellent judgment in not tickling more freely these would be apes of greatness. Let the "gouty aristocracy" come to this country, and the only return which will be asked of them is the prompt payment of the doctors' bills. The profession here doesn't need ribbons and garters to bolster up its dignity.

The Medical Record metions the following remedies for vomiting of pregnancy, as recommended by prominent homœapaths: PROF. H. G. GROSVENOR gives a solution sulphate of hydrastia strong enough to give the water a straw color. Of this he has his patient to drink *ad libitum*. When nausea is very severe he dissolves two grains of soapina in a half glass of water, and gives teaspoonful doses. PROF. JOHN W. STREETER gives ten grains of ingluvin. Shades of Hahnemann!

The visit of DR. MORELL MACKENZIE to Germany, and the correction of the German surgeons' diagnosis of the laryngeal difficulty of their Crown Prince, seems to lie on their minds to disturb them after the manner in which the crow is said to disturb the disgestion of the American politician. The Prince is getting better, and will not have his larynx removed either.

The Chicago Medical Times has the following, and we are not sure that it is not about right: "Country physicians save more money every year, on an average, than city doctors. Their minds are free, their consciences easy, and their pocket-books flush, even if they cannot 'put on style' and hold prominent college and government positions."

"Do you rectify mistakes here?" asked a gentleman as he entered a drug store. "Yes," replied the polite clerk, "we do, if the patient is still alive."

Book Notices.

A SYSTEM OF GYNÆCOLOGY. By American authors. Edited by MATTHEW D. MANN, A. M., M. D., Professor of Obstetrics and Gynæcology in the Medical Department of the University of Buffalo, N. Y. Vol. I. Illustrated with 300 colored plates and 201 engravings on wood. Philadelphia: Lea Brothers & Co.

It is exceedingly fitting that a system of gynæcology should be given forth as the product of American pens. America is the fountain of modern gynæcology, and has contributed more than any other country to its development. It is true RECAMIER, of France, resurrected the speculum, and brought the uterus, which had for centuries been hidden, again into view, but America gave to the world SIMS, who not only exposed the uterus and its approach, but did what no man had ever done before—placed them under the complete control of the surgeon—and thus laid the foundation of gynæcology. America, too, has contributed MCDOWELL, and PEASLEE, and the ATLEES dead, and a score of gynæcologists scarcely less illustrious, who are still with us. All things considered, the best treatise on gynæcology must be expected from this country, and when the gynæcologists of this country unite their efforts in a "system" the result would be disappointing were it not to excel any thing of the kind heretofore attempted. An examination of the first volume of the work before us justifies every expectation formed of it. The contributors are HENRY C. COE, of New York; E. C. DUDLEY, of Chicago; H J. GARRIGUES, of New York; E. G. GRANIN, of New York; A. REEVES JACKSON, of Chicago; E. W. JENKS, of Detroit; M. D. MANN, of Buffalo; R. B MAURY, of Memphis; C. D. PALMER, of Cincinnati; T. H. REAMY, of Cincinnati; A. D. ROCKWELL, of New York; A. J. C SKENE, of Brooklyn; E. VAN DE WARKER, of Syracuse, and W. GILL WYLIE, of New York. Some of these names have already become a part of the history of modern gynæcology, and all are those of men universally recognized as competent to speak with authority.

The volume opens with a chapter embodying a Historical Sketch of American Gynæcology, by DR. E. W. JENKS, of this city. DR. JENKS, besides being apt with the instruments of his specialty and familiar with the history thereof, is a master of the art of saying what he has to say in pleasing terms. His chapter, besides being erudite, is very pleasantly written, and forms a very fitting introduction to this great work.

A critical review of the volume would be impossible within the limits of our space, and we must be content with commending it to every reader interested in the division of medicine of which its treats. The work, we understand, is sold only on subscription, but such as may not be called on by an agent can, doubtless, have their orders supplied directly from the publishers.

On the Pathology and Treatment of Gonorrhœa and Spermatorrhœa. By J. L. Milton, Senior Surgeon to St. John's Hospital for Diseases of the Skin, London.
New York: Wm. Wood & Co.
Detroit: John Macfarlane.

When it is remembered that the treatment of gonorrhœa, in its acute stage at least, has of late years passed very largely into the hands of the counter-prescriber, the admission of the physician that a new work on the subject is needed, may be interpreted as not very complimentary. It is, nevertheless, a fact that the results of the treatment of gonorrhœa at the hands of the profession are not the most satisfactory. The so-called specifics have been frequently weighed and found wanting in the experience of every practitioner. In the book before us the difficulties have been clearly recognized, and a very careful and intelligent effort has been made to remedy them. The author has attempted to show that the disease may be most successfully handled on general therapeutic principles and without the empirical use of the "specifics." He has recommended nothing which has not withstood the brunt of his own experience or that of other competent observers. His aim has been "to separate clearly what might be looked on as established from what was doubtful, and not merely to prove every assertion, but to place it on such a basis that it could not be disproved." His consideration of spermatorrhœa will commend itself to every intelligent reader.

The Cremation of the Dead. Considered from an Æsthetic, Sanitary, Religious, Historical, Medico-legal and Economical Standpoint. By Hugo Erichsen, M D., Licentiate of the Royal College of Physicians and Surgeons, Kingston, Canada: Member of the Committee of Organization of the First International Cremation Congress; Honorary Member of the Cremation Societies of Milan, Italy; etc. With an Introductory Note by Sir T. Spencer Wells, Bart., F. R. S. Illustrated.
Detroit: D. O. Haynes & Company.

Dr. Erichsen is already familiar to our readers, whom he has addressed on several occasions on the subject of burning the dead, as a substitute for burial. He has been an enthusiastic advocate of the rapid resolution of the body into its elements by fire, and his little book, of 264 duodecimo pages, before us is replete, both with arguments in favor of such disposition and with instructions for the construction of the necessary apparatus. He has presented the subject very acceptably, and we cordially commend his book to those who feel an interest in the matter. Its general perusal would, moreover, do very much towards removing the well-nigh insuperable prejudice against incineration existing in the minds of the masses. The publishers have presented the volume in a very commendable style, and their enterprise deserves liberal recognition.

Therapeutic Brevities.

Amenorrhea.—Chloride of ammonium (gr. ivss—gr. xv. several times daily) is commended by Anstie and Cholmeley as an emmenagogue. As an emmenagogue and to relieve menstrual colic, Pitschaft recommends borax, though some doubt its efficacy:

℞ Boracis,
Aquæ amygd. am., ää ʒ j.
Aquæ melissæ, ℥ iv.
M.—A tablespoonful hourly.

A famous emmenagogue is the elixir proprietatis Paracelsi, composed of:

℞ Aloe,
Myrrh, ää ʒ ss.
Croci,* gr. xv.
Spirit, ʒ v ☉ij.
Acid. sulphur. dil., ʒ ss.

The iodide of iron and saccharated iodide of iron are also widely used. Brera recommends a vaginal injection of water of ammonia, gtt. 5—15 in ʒ xv—℥ iv of mucilage or milk, Kopp prescribes the following:

℞ Inf. summitat. sabinæ, ℥ vj ʒ iij.
Boracis, ʒ j.
Sacch. alb., ʒ j.
S.—One tablespoonful three times daily.

Tavignot's prescription is:

℞ Phosphori, gr. iss.
Ol. amygdal.,
Ol. cacao, aa ʒ ij.
Flor. malvæ pulv., q. s. ad. pil. No. 100.
Sig.—4–6 pills twice or three times daily. [*Dose too large.*]

In suppression or retention of the menses, Fuchs gives:

℞ Ol. sabinæ, ʒ ss.
Ol. terebinth, rectific., ʒ viiss,
M. S.—Apply to the inner surface of the thighs.

---

* [Trousseau says it is a fact of public notoriety that women engaged in picking saffron suffer from frequent attacks of uterine hemorrhage.]

LEBERT'S formula is:

℞ Ol. sabinæ,
Ol. rutæ, aa ʒij.
Sacch. albi., ʒ vijs.
Dissolved in aquæ dist., ℥ v.
Add syr. sacch., ʒ vijss.
M. S.—One tablespoonful every two hours.

As an emmenagogue in chlorosis, OESTERLEIN advises:

℞ Myrrh,
Aloes,
Ferri pulv., aa ʒ j.
Extr. valerian., q. s. ut ft. pil. No. 100.
M. S.—Five pills three times daily.

FELLER'S emmenagogue is:

℞ Myrrh, ʒ jss.
Boracis, ʒ ij.
Croci, gr. xxiij.
Ol. caryophyll, ʒij.
M.—Ft. chartas, No. viij.
S.—Two or three powders daily.

Sulphate of iron has been found useful:

℞ Ferri sulph., gr. iij$\frac{2}{3}$;
Rhiz. zingiber, gr. viij-xv.
M.—Ft. pulv., No. 10.
S.—One powder morning and evening.

BACHER'S prescription is:

℞ Ext. hellebore,
Ext. myrrh, aa ʒij.,
Pulv. herb. card. benedict, q. s. ut ft. pil. 50.
S.—Two or three times daily.

WOLF gives:

℞ Ext colchici acid, gelsemin.
Aloes pulv., aa ʒ ss
Ft pil. No. xxx.
S.—One pill morning and evening.

Another recommendation of OESTERLIN is:

℞ Canthar. subt. pulv., gr. xv.
Ferri oxydat. fusc.,
Aloes, aa gr. xxiij.
Extr. chamom., q.s ut ft. pil. No. 50.
S —One to two pills three times daily.

RADIUS advises the following in chlorotic amenorrhea:

℞ Aloes pulv., ʒ ss–j.
Ferri pulv., ʒ ij.
Rud. rhei pulv., ʒ j.
Mucilag. tragac., q. s. ut ft. pil. 120.
S.—Two or three pills twice daily.

RINGER and PHILLIPS say that sudden suppression of the catamenial flow, caused by cold, can be relieved by aconite in drop doses of the tincture every half hour or hour. BARTHOLOW says this remedy has a high degree of utility in congestive dysmenorrhea occurring in plethoric subjects. The same authority also says apiol is serviceable in the amenorrhea of functional inactivity and anæmia. The state of the blood and the constipation having been considered—give gr. xv at the time of the menstrual molimen, or just preceding the time when the flow should begin. Repeat daily in obstinate cases. PROF. PARNIN also favors apiol. EBERLE says (and BARTHOLOW confirms the statement) that with polygonum hypropiperoides ("smartweed") he has been more successful in amenorrhea than with any other remedy or mode of treatment. He gives ♏xxx of the fluid extract four times daily. When dependent upon atony of the ovaries and uterus, BARTHOLOW says amenorrhea is cured either by static electricity, by faradism, or by the interrupted galvanic current: "A shock from a Leyden jar may be transmitted through the pelvis, or a strong faradic or galvanic current may be applied by means of one pole on the spine, the other on the hypogastric region. In the case of married women, an insulated vaginal electrode may be introduced and placed in contact with the os uteri. This is a more effective way of making the applications than by the electrodes placed externally. In neuralgic dysmenorrhea the galvanic current will afford relief in a large proportion of cases." J. C. REEVE, M. D. (System of Medicine—PEHPER), says, "Electricity is the most reliable emmenagogue."—*Med, and Surg. Reporter.*

[The omission of permanganate of potassium from the above list of remedies is probably an oversight.—ED.]

TREATMENT OF FLATULENT DYSPEPSIA.—HUCHARD recommends the following formulæ:

Salicylate of bismuth, 2 parts.
Calcined magnesia, 2 parts.
Powdered willow charcoal, 3 parts.
Oil of anise, 1 part.

Of this powder a small teaspoonful may be taken an hour or a half hour before a meal. When gastralgia is added to flatulent dyspepsia, he recommends the following:

Syrup of peppermint, 250 parts.
Hydrochloric acid, 1 part.
Hydrochlorate of cocaine, $\frac{1}{10}$ part.

Of which a small glass (such as those in which liqueurs are served) may be taken after a meal. —*Revue Générale de Clinique et de Thérapeutique*, May 19, 1887.

A USEFUL POWER FOR THE TREATMENT OF THE URIC ACID DIATHESIS.—DRUITT is quoted by the Journal de Médecine de Paris of May 22, 1887, as prescribing as follows:

℞ Borac. pulv., gr. 15.
Sodii bicarbon. pulv.,
Potass. nitrat. pulv., ää gr. 8.
for each powder.
To be taken 3 times daily in abundant fluid.

A Rectal Injection for the Convulsions of Children.—Simon advises the following:

Musk, gr. 3.
Camphor, gr. 13.
Chloral hydrate, gr. 8.
The yolk of one egg.
Distilled water, ℥5.

The intestine should be first emptied by an enema of oil.—*Les Nouveaux Remèdes*, May 8, 1887.

Cocaine and Borated Cotton.—Cotton prepared after the following formula is very useful in burns:

Solution of cocaine, 2 per cent., 30 parts.
Boric acid, 2 parts.
Glycerin, 4 parts.
Carbolic acid, 1 part.
Absorbent cotton, 30 parts.

Dissolve the boric acid in glycerin, add the cocaine solution, and to this add the carbolic acid. The cotton should be thoroughly soaked in the mixture, and dried in a current of warm air.—*Les Nouveaux Remèdes*, May 8, 1887.

Medical Progress.

What Diseases of the Skin Leave Scars.—Next in importance to the question of contagion is, if we may judge by the anxiety of patients, the question of disfigurement in skin diseases.

One is constantly asked the question, "Doctor, will this leave a scar?" and this question any physician who knows the nature of the disease before him should be able to answer in most cases confidently and correctly. To do so, however requires some consideration of the nature and mode of formation of scars, and of the character and pathological anatomy of the lesions under examination.

In Hebra's classic work there is a chapter devoted to the subject of scars, which is worthy of attentive perusal, but which gives only a very slight amount of consideration to the subject from the point of view we are now taking. Hebra tells us that scars result only from those affections of the skin which destroy the structure of the corium, or at least of the papillary layer. All superficial inflammatory and exudative processes run their course without cicatrization; erythema, herpes, eczema, psoriasis, pemphigus, lichen ruber and some of the earlier forms of syphiloderma may be mentioned as among them. Exceptionally, however, even these show scars, as in severe cases of herpes zoster, we are warned, while yet the disease is at its height, by the occurrence of hemorrhage into the normally clear vesicles. After the vesicles have burst and the crusts have fallen off, the papillary layer infiltrated with hemorrhages is exposed, and its uppermost strata become destroyed in the course of an occasionally very copious suppuration. Healing is then, of necessity, followed by scarring. These remarks of Hebra's are borne out by general observation in variola, where the milder forms of eruption at times leave no scar, while the severe forms result in hideous disfigurement. I may say here that I do not think any of the numerous preparations recommended for the purpose of preventing pitting will accomplish that object if the lesions are at all deeply seated.

It may be profitable to run over the list of the best known skin diseases, and examine which of these are and which are not commonly followed by scarring

Taking the classification of the American Dermatological Association as a basis, we find among Class I, Disorders of the Glands, but two which leave any trace, namely, cyst and wen, both caused by the retention of the sebaceous secretion. In Class II, Inflammations, we find the severer forms of dermatitis (under which head are included burns), furuncle, and certain forms of acne, as alone ordinarily followed by scars. The erythemata, urticaria, herpes (excepting rare cases of hemorrhage), herpes zoster, psoriasis—though Hutchinson says scars may always be found in this affection if carefully looked for—pityriasis rubra, lichen, eczema (that multiform and most common of all skin diseases), prurigo, impetigo, ecthyma and pemphigus are not ordinarily followed by scars. But it does not follow that patients who have formerly had these diseases do not show scars. If an eczema or any other pruritic disease is inveterate and of long standing, the patient will often scratch himself until excoriations result as secondary effects, and these may be followed by marked cicatrices. It is the same with impetigo and ecthyma. While, on the other hand, not all forms of acne or furnucle are followed by scars. Class III, Hemorrhages, never leave scars, properly so called, but sometimes hæmatin may be deposited from the extravasated blood, and failing to be observed they may cause permanent stains

Under Class IV, the Hypertrophies, there are none which, left to themselves, leave actual scars, but perhaps this may be because they do not recover spontaneously. As a result of treatment other than eradication by caustics or the knife, keratosis pilaris, morphœa and rosacea may give rise to scars.

The Atrophies, Class V, those at least of the cutis, being themselves more or less of the nature of a scar process, as atrophia maculosa et striata, of course, when fully developed, display more or less of the cicatricial character throughout their course.

When we come to Class VI, the New Growths, we come to those affections, some of which, from the structure of their lesions, must, almost of necessity, eventuate in scarring. While fibroma, neuroma and xanthoma do not undergo spontaneous evolution into cicatrix, angioma occasionally does so, and the new growths of granulation tissue, as lupus, scrofuloderma, syphiloderma, etc., if they undergo spontaneous involution at all, and do not eventuate in pro-

gressive destruction of tissue, almost invariably leave behind them some cicatricial tissue. Exceptions must be made, however, to the mildest cases of erythematous lupus and to the earlier macular and papular syphilodermata.

Of course Class VII, Ulcers, naturally end in scarring, while equally, as a matter of course, Class VIII, the Neuroses, excepting certain trophoneuroses (whose presence, by the way, is usually first shown by their effect in changing the nutrition of the tissues), lead to no change in the tissues, excepting as the result of scratching. The same is the case with regard to Class IX, that of Parasitic Diseases. While cicatrices as the result of scratch marks are by no means an unusual accompaniment of scabies and pediculosis, the only parasitic skin disease which itself leads to scarring is tinea favosa. Severe cases of favus occurring in the scalp not unfrequently lead to deep cicatrices.

To recapitulate—cysts, wens, the deeper forms of dermatitis, furuncle, anthrax, herpes zoster, acne, ecthyma and tinea favosa may at times and under certain circumstances give rise to the formation of scars. Scrofuloderma and syphiloderma in some forms, the various forms of lupus, carcinoma and sarcoma almost inevitably lead to scarring. Another class of diseases which may indirectly, though not directly, give rise to scars through scratching are the pruriginous affections *par excellence*, *i.e.*, pruritus and eczema. These may be followed by cicatrices and other results of scratching when the lesions themselves might not leave anything which could be called a cicatrix.

With these facts in mind, the physician can often soothe the fears of anxious patients, their parents and friends, by assuring them that threatening lesions, with profuse discharge and piled-up crusts, will not eventuate in scarring. One point may be remembered in this connection, and that is, that when we have crusts of dried serum and serous discharge only, we rarely have scars following, while lesions resulting in the exudation of pus are not unfrequently followed by cicatricial reparation.

THE VALUE OF SOAP IN SKIN DISEASES.

We may look at this subject from several points of view. In the first place the question often arises, what toilet soap is most convenient or least harmful to the skin in diseased conditions? We cannot entirely debar the patient with an acne of the face or an eczema of the hands from such ablutions as are requisite to preserve ordinary cleanliness, but I think the use of soap may be limited in most cases and should be prohibited in some. Fastidious persons sometimes say, "But, doctor, I *must* wash myself sometimes;" to which I think a similar answer may occasionally be given to that made by the cynical judge before whom the culprit plead, when confessing the theft of a loaf of bread, "But one must live, your honor," "I do not see the necessity of that," replied the judge. If washing in gruel or starch water is not sufficient to cleanse the skin, and some sort of soap must be used, I generally recommend Pear's, or white Castile, or, best, some good soap containing oatmeal, mallow, etc. The trouble is, that it is next to impossible now-a-days to get a pure, well-made soap. Castile soap is often very poorly made, and the introduction of starchy matters and strong scents enables manufacturers to palm off almost any kind of stuff under the name of soap.

When we come, in the second place, to consider the employment of soaps in the removal of crusts, grease, etc., from the skin, we meet with quite different requirements. We want here a strong soap with excess of alkali. This indication is best met by the *sapo viridis* of the Germans, sometimes called Hebra's green soap, only it is not green but brown, or when it is green should be avoided as adulterated. This soap contains several per cent. of free caustic alkali (potash), and in the semi-solid form as sold, or dissolved in half its weight of alcohol, as "*spiritus saponis alkalinus*," is an admirable detergent. Soap used in this way should never be allowed to remain on the skin, but, when it has fulfilled its function, should be carefully washed off, unless a caustic effect is desired. I cannot go into the various ways in which this soap may be employed in the treatment of skin diseases, because there number is endless. A physician who knows how to handle sapo viridis, and get the utmost out of it is a capable dermatologist.

The third point of view from which we may consider the employment of soaps in diseases of the skin is as a direct means of conveying specific medicinal effects of various drugs. On this point, too, I must be brief, but there is much food for thought in the contemplation of medicated soaps. Soaps containing salicylic acid, naphthol, bichloride of mercury, etc., have been thrown on the market in great abundance by enterprising manufacturers, but dermatologists have never been known, in this country at least, to take up the subject with any great enthusiasm. I cannot speak for my *confrères* on this matter, but after considerable experience with medicated soaps, should be inclined to pronounce those hitherto brought forward as indicating profound ignorance on the part of the manufacturers, or—painful thought—a low opinion of the intelligence of the practitioner of medicine. Some of these soaps are obviously messes of chemically incompatible substances. Others contain insoluble or inert matters, while of those which I have tried the majority are simply very bad soaps, with no other quality but that of irritating the skin with which they are brought in contact. This last quality has prevented my testing the medicinal qualities of some soaps, as those containing salicylic acid, naphthol, etc.

I think a well-made soap containing sulphur is useful in many cases where this drug is required, but I scarcely know any make of sulphur soap which can be called of even fair quality.—A. VAN HARLINGEN, M. D., in the *Polyclinic*.

NOTES ON THE CAUSE AND TREATMENT OF FUNCTIONAL INSOMNIA.—At a meeting of the New York Neurological Society, May 3d, DR. B. SACHS read a paper on this subject. Under the term he included cases of insomnia pure and simple, occurring in persons of the neurasthenic habit. He prefered to say neurasthenic rather than hysterical, for in his experience actual insomnia was less frequent in truly hysterical patients than in those suffering from cerebral or spinal neurasthenia. A number of typical cases were cited. The author thought in the majority of such cases there

was good evidence of disturbance in the cerebral circulation. As it had been found in animals that an increased rapidity of the cerebral circulation was accompanied by a deficient circulation in the peripheral parts, so in many cases of chronic insomnia cold extremities, pallor of the skin, and a scanty uterine flow pointed to a deficient peripheral circulation, and in many of these cases there was weakness of the hears, with a weak pulse Special attention was called to the simultaneous occurrence of insomnia and headache, and to the fact that as a rule the headache was of the paralytic migraine type.

The treatment of migraine and that of insomnia were similar in many respects. The author wished particularly to insist on the point that continued hypnotic medication was worse than useless. The good results obtained by him had been due to close attention to matters of general regimen; to the treatment of anæmia; and to the strengthening of the force of the heart's action by cold douches, by the regulation of exercise, and by the methodical performance of definite forms of active physical exercise, such as riding, rowing, and mountain climbing. Hypnotics were of use only at the outset of treatment; among these the reader mentioned chloral and bromides, to be given at night, or bromides alone, amorphous hyoscyamine, urethane, and paraldehyde. Their use should be discontinued as soon as a slight improvement was noticeable, and from that time onward general treatment was to be pushed vigorously.

Dr. Fisher thought that a very common cause of insomnia was anæmia, and he had seen considerable success in its treatment with cod-liver oil, cream, and other articles intended to improve nutrition. In some of the cases ordinary hypnotics had been administered without any avail. The patients might have the appearance of being well nourished while they were really anæmic. The mineral tonics were indicated, as a rule.

Dr. George W. Jacoby thought the paper was an exceedingly important one, especially in that it called attention to the fact that many patients with insomnia could be cured without the use of any medicines whatever. He agreed with the author that it was necessary to discriminate as to the cause of the wakefulness. He thought that in the majority of cases the cause would be found to lie in the circulation—not always in anæmia, but frequently hyperæmia. The cause being done away with, the sleeplessness would be overcome, but that which would cure anæmia in one case would not cure it in another. Active and passive exercise, particularly active exercise, were of benefit For patients who could not go out, the muscle-beater was very useful. While he had not much faith in static electricity in the treatment of insomnia, he cited one case in particular in which a physician, who had applied it to one of his patients for another purpurpose, himself became sleepy under its influence. Perhaps the production of ozone by the instrument was the cause of this sleepiness, for it was well known that when we went into an atmosphere of ozone we were likely to become sleepy.

Dr. V. P. Gibney had noticed that static electricity tended to produce sleep. It was one of the few things that it had been found good for at the hospital with which he had formerly been connected.

Dr. W. R. Birdsall thought, with the author, that we must adopt hygiene rather than purely medicinal measures for the cure of insomnia, but we were occasionally forced, as the author had said, to resort to some drug for temporary effect. For this purpose he had produced benefit without injurious effects—such as sometimes came from the use of the bromides, hydrate of chloral, etc.—with a drug first recommended to him by Dr. Seguin, namely, conium. This, given in large doses, fifteen or twenty drops, or more, of the fluid extract, had in his hands been beneficial. He had continued its use two or three months without deleterious results.

Dr. G. M. Hammond thought that fully eighty per cent. of all his patients were similar to those described in the paper—persons suffering from insomnia, mental anxiety, etc. In the large majority of the cases he thought insomnia was due to hyperæmia of more or less limited areas of the brain. When the patients did sleep, they had unpleasant dreams. They were also frequently sufferers from dyspepsia, constipation, spots before the eyes, noises in the ears, sometimes hallucinations connected with various senses, and coldness of the extremities. It was rare for such patients to go away without being cured, but, if they subjected themselves again to the same causes, the condition returned. He used bromides, and stuck to them right through the disease. He gave only ten or fifteen grains three times a day, and also gave fluid extract of ergot. He applied static electricity and dry cups to the back of the neck, and regulated the sleeping hours.

Dr. Leszynsky had been rather surprised, in view of a recent discussion before the society, to hear the author speak of the use of hyoscyamine as a hypnotic. It was a mistake to rely upon large doses of bromides given at night. There was an objection to their use in the case of ladies because of the bad odor which they gave the breath. He had not been able to discover any peculiarity in the circulation of the retina in these cases.

Dr. Weber said that since he had adopted the treatment recommended by Dr. W. A. Hammond, and just described by Dr. G. M. Hammond, he had obtained the best results in suitable cases for this mode of treatment. But in other cases the bromides might cause excitement instead of aiding sleep. When there was gastro-intestinal disorder, he added to the treatment the use of calomel, with benefit.

Dr. Leszynsky referred to a remark by Dr Birdsall concerning the use of a sinapism or other cutaneous irritant, and said that Dr. W. H. Thompson had called attention some years ago to the beneficial effects of Cayenne pepper and like irritants to the surface of the body.

The President had found the warm bath a very valuable measure in many cases; in mild cases of insomnia the cold douche down the back and massage had proved useful. Bence had discovered that ozone had hypnotic influence. Lupulin had been of benefit in the insomnia of old people; and lavender in some cases in which the stimulus of alcohol or warm food had failed.

Dr. Sachs objected to the use of the bromides, particularly in small doses, more than

to anything else in the treatment of the class of cases under discussion, namely, those of insomnia in neurasthenic subjects. It was likely to do more harm than good. The testimony at the discussion referred to by DR. LESZYNSKY had not been against amorphous hyoscyamine, but against the crystalline form.—*New York Med. Journal.*

CONDITIONS STIMULATING TYPHOID FEVER. Conditions in which typhoid fever is simulated by various diseases are far from exceptional; and BRISTOWE has called attention to these under the title of the "typhoid condition," which he says occurs in erysipelas, carbuncle, pneumonia, or any severe inflammation tending to a fatal issue in the specific fevers and in acute hepatic atrophy and nephritis.

But this also occurs in other diseases. It must have fallen to the lot of many of my readers, as it has fallen to mine, to have seen the phenomena of typhoid prostration when all the nervous symptoms of typhoid fever appeared without the septic accompaniments, antecedent history, or specific physical nonnervous symptoms of true typhoid being observable.

Beside the toxæmic conditions, other than true typhoid, to which BRISTOWE[1] has called attention, this "typhoid condition" is secondary to nervous exhaustion.

There is very little doubt that the melancholic type of typhomania (Bell's disease) described by SCHULE,[2] is often regarded as true typhoid fever. Even the true typhomania, after the prodromal period, often presents a striking resemblance to typhoid fever.

As BALL[3] says: "The subsequent period of depression bears a striking resemblance to typhoid. The emotional exaltation is replaced by somnolence, followed by a low muttering delirium. The lips tongue and gums are purplish and swollen, and petechia, ecchymoses, and ulcers appear on them. The cardiac impulse becomes feebler. Pulmonary and renal congestion results; albumen is not rarely found in the urine. DUMESNIL[4] attempted to found the differential diagnosis between typhoid fever and typhomania on this single symptom, but albuminuria is not always present in the typhoid fever delirium, and is often present in typhomania. Intestinal complications may present themselves: constipation during the early stages, diarrhœa during the later.

THULÉ, TRELAT and CALMEIL have pointed out a condition of pure exhaustion which closely simulates true typhoid, but like the so-called melancholiac form of SCHULE, and, unlike the true typhomania, tends to recovery. This melancholiac form of SCHULE, as SPITZKA[5] has pointed out, differs from true typhomania in being the result of a condition of exhaustion rather than a furibund pathological state. SCHULE does not, however, stand alone in regarding this melancholiac type as typhomania, THULÉ expresses the opinion that typhomania results from cerebral inanition, whereas the latest findings, those of KIERNAN,[6] CLEVENGER[7] and SPITZKA,[8] tend to show it to be a furibund state. The nervous symptoms characteristic of true typhoid delirium, general neurasthenia, subsultus tendinæ, etc., are all found in nervous typhoid, as also are enuresis and relaxed bowels. Some years ago I expressed the[9] opinion that, on the absence of petechiæ, and sordes on the teeth, and on the condition of the tongue as well as the character of the delirium, a diagnosis might be made between typhoid fever, delirium and nervous typhoid. These elements of differential diagnosis are, however, wanting in both directions, in just the cases in which they are needed.

These cases occur among the victims of over-brain strain and prolonged nerve-tire, from exhaustive great enterprises incessantly pursued and cruel, unrelenting goading of the faculties until tired nature can stand no more. A period of brain-strain succeeded by insomnia has preceded all the cases which have fallen under my observation. And in all of them signs of physical convalescence have appeared in about half the time that they show themselves in true typhoid. This convalescence has not invariably marked an escape from a prolonged attack of mental aberration. In the cases which recover without passing into confirmed insanity it is remarkable how soon the disordered physical functions recover their tone. Sleep, "that knits the ravelled functions" of unsound and spun out nerve and brain cells, soon returns spontaneously, and twenty-four hours' slumber without sedatives, is not unusual; the gastro-intestinal system regains its tone, and the patient recovers. If the case be one of typhomania death is likely to result. Even in the condition which I have called nervous typhoid, death often results from heart failure and exhaustion. There can be but little doubt that, in the case of large commercial cities having a low death-rate, but with an abnormal percentage of deaths from typhoid fever, this abnormal percentage is chiefly due to the diagnosis of typhomania and nervous typhoid as typhoid fever.

DR. KIERNAN informs me that in Chicago he has been called in consultation in cases of nervous typhoid and typhomania, which the physicians had diagnosticated as typhoid fever, frankly admitting that there were abnormal features about the case, and also admitting that he had had several deaths in similar cases. The law may be laid down that cities which furnish a large proportion of cases of paretic dementia to the insane hospitals, also furnish a large percentage of deaths from typhoid-like neuroses and psychoses. These cases of "nervous typhoid" require the most judicious management by those methods best known to neurological and psychiatric science.

Typhoid fever in some of its most obvious features may hence be simulated by the specific diseases, erysipelas, etc.; by the asthenic confusional insanities from exhaustion; by typhomania (Bell's disease); by renal disease (as BRISTOWE and DR. L. ST. JOHN have pointed out), and acute hepatic atrophy. It is easier for the over-worked practitioner to make a diagnosis of typhoid in these cases than to thoroughly analyse his cases. Treated properly

---

1 Practice of Medicine.
2 Handbuch.
3 La France Medicale, June 12, 1880.
4 Annales Medico-Psych.
5 Insanity—Its Classification, Diagnosis, and Treatment.
6 Detroit Lancet, Vol. III.
7 Amer. Jour. of Neur. and Psych., 1883
8 Op. cit.
9 Alienist and Neurologist, 1884.

the acute confusional insanities of exhaustion have better prognosis than typhoid, and hence a little time spent in their analysis would be well repaid.—C. H. HUGHES, M. D., in the *Medical Standard*.

ROTHELN.—Two epidemics of roseola formed the basis of the author's paper, the first of which occurred in 1866, the second in 1885. In the first, twenty-two children were seen, eleven of whom had had measles a short time previously, and two scarlatina. In the second, forty cases were seen, in about half of which measles had previously been present. The disease presented all the characteristics of a benign disease, the eruption appearing without prodromata, in the form of intensely red spots disseminated over the entire body. The eruption appeared under two different aspects, now consisting of small maculæ, resembling spots of red ink, and again forming larger spots, which were clearer at the centre than at the periphery, the latter forming a zone with a deep color. These spots did not have the round form which characterizes the eruption of measles, their borders were irregular, and between them were portions of healthy skin. Their number, was sometimes so great, however, that the borders ran together, but even in such cases the lines of demarcation were not entirely obliterated. The eruption first appeared upon the face, where it was always the most intense, then upon the shoulders and the anterior surface of the arms, and finally upon the remainder of the body. The intensity of the redness usually diminished from above downward, so that the eruption was much less pronounced upon the legs than upon the trunk. In some cases certain regions of the body had no eruption, for example, the face was not infrequently spared; in others it appeared in the form of irregular patches, perhaps being confined entirely to the abdomen in the form of large, deep red spots. Sometimes there was a diffuse erythematous redness occupying the intervals between the spots, so that the appearance was that of scarlatina. As a rule the eruption of this disease never becomes so confluent as that of measles: but most frequently the spots are so close together that certain regions of the body appear to be covered with red varnish or glazing. From these spots a certain number of papules containing a sero-purulent liquid may be developed. Petechiæ were never observed in connection with this disease, and the eruption was rarely the occasion of pruritus. The duration of the eruption was shorter than that of measles or scarlet fever. The entire body was usually involved by it within a period of twelve hours, and it rarely lasted more than twenty-four hours. The average duration of the disease itself was three days, extreme cases extending to five days. In the average of the cases there was no fever, and when it was present it was of moderate intensity, beginning when the eruption appeared, and usually lasting only one day. The general condition was usually good. The complications were injection of the conjunctivæ, redness of the pharynx, and swelling of the lymphatic glands. Photophobia nor weeping were ever seen. In the bucco-pharyngeal cavity the redness was always uniform and limited to the posterior wall of the pharynx, the velum of the palate, the tonsils, and the most remote part of the vault of the palate. Pain in the top of the cervical and mastoid glands was of exceptional occurrence, but the axillary and inguinal glands were swollen in almost all cases. In robust children the issue of the disease is favorable, but it may be fatal in little children with weak constitutions, especially if complicated with bronchitis, pneumonia, or cerebral hyperæmia. It is only slightly contagious, and its period of incubation may be fourteen or twenty-two days, or even longer. The author does not think a benign disease like this should exclude a child from school for five weeks.—*Rev. Mens. des Mal. de l' Enf.—Archives of Pædiatrics.*

TREATMENT OF NEURALGIC SORE THROAT.—Most practitioners of medicine have frequently noticed, upon inspecting a supposed sore throat, that much to their astonishment, there was but very slight redness of the fauces, and that it could not in any way account for the painful sensations described by the patients. DR. HUCHARD says that these cases are not inflammatory angina at all, as the pain is not owing to the inflammation itself, but they are what he calls "neuralgic angina." These cases are similar to those congestions or slight uterine hemorrhages that are associated with lumbo abdominal neuralgia, or those ocular hyperamias that are provoked or at least kept up by facial neuralgias. The following are the clinical characters that will enable us to diagnose them: 1st. An entire discordance between the pain and the superficial inflammation of the tonsils, etc. 2d. Entire subordination of the hyperemia to the neuralgic symptoms, which last precedes all inflammation and often survives it. 3d. The character of the pain is not continuous, but manifests itself by paroxysms, which take place apart from deglutition, and increase at night. It is also very rarely isolated, but has other neuralgias (facial, occipital, cervical, etc.) at the same time, and it is frequently complicated with otalgia, which is much more violent than in other inflammatory forms—when seen with tonsillitis, for instance. These pains are frequently so violent that one is disposed to think of meningitis.

These clinical facts command the following therapeutic indications. The treatment must be directed more against the neuralgic element than against the congestive one: so that all emollients and antiphlogistic remedies are useless. To fulfill the pathogenic indication, DR. HUCHARD advises the following antiperiodic and antineuralgic medicines:

℞ Quininæ sulphatis, 20 centigrm.;
Ext. aconiti radicus, 1 centigrm. M.

Fiat pil. (one). Sig.—Give three such pills, at an hours interval, in the morning. When the neuralgic pains are very intense, give a cachet of hydrobromate of quinine, twenty-five centigrammes, in which put a granule of aconitine of one quarter milligramme size, and give it three times a day.

As to local treatment, order the pharynx to be touched two to four times a day with a little of the following mixture on a brush:

℞ Glycerini (puri) 10 grm.:
Morphinæ hydrochloratis, 10 centigrm
Aquæ menthæ piperitæ, 4 gtt. M.

The peppermint acts by its "antalgic" properties, as shown by DELIOUX DE SAVIGNAC and others.

In all very painful sore throats accompanied by spasmodic cough, the following formula may be used locally in the same way:

℞ Glycerini (neutral).
Aquæ menthæ pipertæ, aa 10 grm.;
Potassii bromidi, 5 grm.;
Cocainæ hydrochloratis, 50 centigrm.
M.
Sig.—Paint on part as required.

FLATULENT DYSPEPSIA.—Before closing DR. HUCHARD'S prescriptions, we would like to give one that he gives very often in the above disorder when it is in the pure atonic form, without acidity or heartburn, but simply discomfort, pain and flatulency. His idea is that there is present a decomposing fermentation, and therefore the indication is the antiferments.

℞ Aquæ aurantii florum, 100 grm.;
Aquæ melissæ, 50 grm.;
Aq. chloroformi (saturated), 100 grm.
M. Sig.—Take a dessertspoonful before each meal.

About the middle of each meal take a glass of oxygen water. The oxygen water ordered is now manufactured in Paris by a firm who have a process for making oxygen gas, and they deliver it in siphons, like the familiar ones seen in all the hotels and restaurants, and supposed to contain seltzer water.

The writer strongly advises the use of the above formula, as he has seen great benefit from it in a number of cases of flatulent dyspepsia. The oxygen water might be replaced by some natural spring water with but little gas in it.—*Med. Times.*

THE TREATMENT OF EPISTAXIS BY COUNTER IRRITATION OVER THE HEPATIC REGION.—In a letter to the London Lancet, ALEXANDER HARKIN, M.D., F.R.C.S., thus emphasizes the value of counter-irritation in epistaxis:

I was much pleased to observe in a letter from your Paris correspondent, dated April 27, that at a recent meeting of the Academy of Medicine M. VERNEUIL read a communication upon the treatment of certain forms of epistaxis by counter irritation over the region of the liver. In the first case related by M. VERNEUIL, quinine, ergotine, and digitalis had all been tried in vain. In the second, plugging had failed. The third had been the subject of chronic nephritis, with secondary affections of the heart and liver, and the cavity of the nose had been plugged without effect both with ergotine and the perchloride of iron. M. VERNEUIL'S treatment, which was immediately and permanently effective, consisted in the application over the region of the liver of a large blister. M. VERNEUIL had at first thought that the method was entirely his own, but from bibliographical research it turned out that it had been anticipated to a certain extent by GALEN, who says that large cupping glasses applied to the hypochondriac region arrest nasal hemorrhage. To me it is very satisfactory to learn that a mode of treatment practiced by myself successfully for many years, and reported in the Lancet of Oct. 30th, 1886, with cases in illustration, has also been advocated by so eminent an authority in continental medicine, and as far as he was concerned, independently of any suggestion from another. I am quite sure that, in his case any more than in my own, the dictum of GALEN had nothing to do with its origination. It is of more importance that the remedy, which is undoubtedly of the utmost value, should be more generally adopted, especially when its application is urged upon merely empirical grounds, but in accordance with accepted pathological teaching. That your correspondent did not appear to be aware of my previous pronouncement on the subject arose possibly from the fact that my publication did not take the form of a monograph with specific heading, but as a portion of a paper treating of congestion of the liver, and protesting against the impolitic interference of modern surgery with the sanitary efforts of Nature when through the medium of hæmorrhage from the hæmorrhoidal veins or the mucous lining of the nostrils she endeavors to lessen the turgescence of an important viscus. In illustration of my views, I gave the particulars of a case of vicarious bleeding from the under lip, which arose immediately after the de-ligation of hæmorrhoidal tumors with excessive bleeding, ultimately cured by blistering over the liver; of a second example, in which dangerous and profuse hæmorrhage from piles was immediately cured by a similar remedy; and then, in pursuance of my theme, appended the cases of three young men suffering from epistaxis, who were instantly relieved by blistering over the hepatic region. A remarkable case, which occurred during the Belfast riots will further illustrate the subject: While paying my morning visit to a straw lodge, temporary barracks improvised for the members of the Royal Irish Constabulary, and accompanied by one of the officers, I found one of the men in bed with a handkerchief saturated with blood, which had flowed from his nose during the greater part of the previous night. On satisfying myself of the nature of the illness, I painted the man freely with the liquor epispasticus over the region of the liver, prescribing no other remedy but rest in bed. On our revisiting the man next day he informed us that from the moment the blister began to pain him the hemorrhage declined, and left him altogether a short time after. To quote from my paper: "The frequent occurrence of epistaxis in youth is evidently due to the excitement and hyperæmic condition of the liver and digestive organs during the period of active growth and the constant demands upon its functional activity. The liver at this stage closely approximates to the condition in after-life, which is the causal factor in the development of piles, and as such is equally amenable to treatment in accordance with etiological principles; the derivative that cures the hemorrhoidal flux as certainly puts an end to the epistaxis, the outcome of hepatic congestion."

ON THE ALLEGED DANGERS OF STARCH-CONTAINING FOODS IN INFANCY.—While it cannot be gainsaid that many artificially-fed children are puny and weakly, it has come to be generally accepted that they are so *because* they are so nourished. Artificial feeding is, no

doubt, carried on to a frightful extent. The writer is no advocate of this as a substitute for maternal nursing. The real cause of the immense infantile mortality among the poorer classes is *congenital debility*. The children are born with such constitutions from mothers themselves feeble, suffering from poverty, the consequences of intemperance, and all their attendant miseries. It is scarcely to be expected that women under such conditions would produce healthy children, or even good breast-milk. An analysis of one hundred cases of artifically-fed children, taken as they came, gave the following results:

In three the mother was dead and the child was brought up by strangers.

In two (illegitimate) the mother had deserted the child.

In one case the child was separated from its mother because of puerperal mania.

In two cases the mother had been sent to prison.

In seventeen the mother was too delicate to nurse the child entirely.

In thirty cases the milk failed to satisfy the child—*i. e.*, known as "hungry-milk."

In twenty the quantity of milk was deficient.

In twenty-five cases the mother was obliged to go out to work during the day, leaving the child to be looked after by some one else.

Thus in one-fourth the cases only would it have been possible to give the child sufficient breast-milk.

In three-fourths the milk was deficient in quality or quantity from some cause or other.

Too little stress, the writer thinks, has been laid upon the inherited weakness of the children, and too much upon the artificial feeding, especially with starchy foods. In years gone by, before malted foods were so extensively used as now, hundreds of children throve upon milk thickened with one of the common starch-containing cereals. It is well known that animals fed on starch do not develop rickets and the diseases usually attributed to starch-feeding, but die of inanition, as the starch passes out in their stools unaltered. While if it could be shown that starch was broken up into some injurious products, something could be established to reason upon.

Much harm has resulted from the almost exclusive attention which has hitherto been bestowed upon this element of infantile dyspepsia. In the preparation of artificial foods the great aim of the manufacturers has been to reduce the starch, following the common prevailing belief that then they are quite harmless. We must go deeper than this if the result we desire is arrived at.

The paper concludes with a strong plea for maternal nursing, both for the child's and the mother's sake, with a statement of belief that the danger of a mother's conveying to her child any dyscrasia by suckling is almost *nil*, and with an earnest plea to the profession to aid, so far as possible, in removing the causes which make artificial feeding on so large a scale a necessity.—*British Med. Journal.—Archives of Pædiatrics.*

ANTISEPTICS IN THE TREATMENT OF DIARRHŒA IN CHILDREN.—DR. EMMETT HOLT, in an interesting paper published recently in the New York Medical Journal, says in conclusion:

Is not the rational treatment, then, to clear out the intestines as promptly and thoroughly as possible, and then address our energies towards stopping further decomposition? In other wards, to treat the cause and not the result?

How should the antiseptic be administered?

The salicylate of sodium I have been accustomed to prescribe in doses of from one to three grains every two hours, according to the age, from three months to three years. In these doses the aqueous solution is tasteless, and can be readily given in food or drink. I have never seen it produce vomiting, but often have seen severe and persistent vomiting controlled by it.

Naphthalin, although possessing a strong odor, is not disagreeable to the taste. On account of its insolubility, it is best given to children rubbed up with some inert powder, like sugar of milk. It should be used in a little larger doses than the salicylate—*i. e.*, gr. j to gr. v in young children, according to the age.

Resorcin must be used in smaller doses, gr. ½ to gr. ij, at corresponding ages. It is bitter, and not so easily given, though freely soluble in water. The bichloride was used in doses of gr. 1-120 to 1-100, but, even in these doses, I have more than once seen it produce vomiting.

In all cases I have insisted upon the antiseptic being given at short intervals, as many small doses are much more likely to succeed than a few large ones.

From the foregoing discussion the following conclusions are drawn:

1. Summer diarrhœa is not to be regarded as a disease depending upon a single morbific agent.

2. The remote causes are many, and include heat, mode of feeding, surroundings, dentition, and many other factors.

3. The immediate cause is putrefactive changes which take place in the stomach and bowels in food not digested, which changes are often begun outside the body.

4. These products may act as systemic poisons, or the particles may cause local irritation and inflammation of the intestine.

5. The diarrhœal discharges, at the outset at least, are to be looked upon as salutary.

6. The routine use of opium and astringents in these cases is not only useless, but, in the beginning particularly, they may do positive harm, since, by checking peristalsis, opium stops elimination and increases decomposition.

7. I do not deny or undervalue opium in any other form of diarrhœa than the one under discussion.

8 Evacuations are to be considered an essential part of antiseptic treatment.

9. Experience thus far leads me to regard naphthalin and the salts of salicylic acid as the most valuable antiseptics for the intestinal tract.—*Am. Med. Digest.*

THYMOL FOR TAPE-WORM.—As an excellent remedy for the expulsion of tape worm, DR. NUMA GAMPI proposes thymol or thymic acid. The physiological effects of thymol are very little known. LEWIN claims for it germicide and antiseptic powers stronger than phenic acid. BUCHOLTZ, studying its antiseptic properties comparatively, has shown it to be surpassed only by the bichloride of mercury; all

the other antiseptics are inferior. Thymol does not confine its action solely to the inferior organisms. The method recommended by DR. GAMPI is as follows:

In the morning thirty grammes of sweet oil are given, and during the day eight grammes of thymol in twelve doses, to be taken one dose every fifteen minutes; twenty minutes after the last dose twenty grammes of sweet oil should be given.

During the administration of the thymol it is necessary to sustain the strength of the individual by cordial or stimulant, as cognac or rum, because the thymol exercises a depressing effect, according to the experiments of HUSEMAN.

In *resume*, the author recommends thymol for the following reasons:

1. It does not produce any disorder of the stomach or intestines, and its depressing action is easily controlled by the use of stimulants.

2. Its easy administration and rapidity of action, without requiring the classical three periods of preparation, expulsion, and after-treatment.

3. It is at the same time both a tæniafuge and a tæniacide.

4. In a case of error of diagnosis, it will merely purge and disinfect the intestinal canal.

5. It may be supposed, from its action upon tænia which resisted all other remedies, that it would give very good results in the removal of any other worms that may be present.

6. Having given at all times the same unvarying result, the author thinks that we have at last in thymol a genuine specific for tænia. —*Medical Times.*

THE DEVELOPMENT AND PRESERVATION OF THE BACILLUS OF TYPHOID.—POUCHET read a paper before the Academy of Medicine of Paris at its session of April 26th, in which he gave the following conclusions:

The conditions of life of the bacillus are within such narrow limits that its destruction is accomplished by many agencies; its proliferation is also arrested by many constituents of organic bodies. Cultures upon peptonized gelatine abound in bacilli in proportion as the amount of peptone is small; they generally disappear at a proportion of one per cent. Salts of copper, potassium, and ammonium hinder the development of the bacilli; this is also true of acids. A saccharine or albuminous liquid is a bad culture medium.

A gelatine of the following composition,

> Distilled water, 1,000 parts;
> Neutral tartrate of potass., 1 part;
> Sugar, 20 parts;
> Phosphate of ammonium, 1 part;
> Sulphate of magnesia, ½ part;
> Extract of flesh, 25 parts;
> Gelatine, 150 parts.

in which the greater part of the micro-organisms contained in water proliferate with activity, does not permit the development of the typhoid bacillus, but the germ preserves its vitality and proliferates energetically if a good culture medium is added (bouillon of intestine, for example), which has been previously inoculated. The typhoid bacillus persists and develops better in pure water than in foul.

The best culture medium is a nutritive gelatine prepared with bouillon, made like a veal broth, from intestine cleared of fecal mater by lavage. In such material the proliferation is very active, and the cultures better than in any other medium.—*Progrès Médicale*, May 7, 1887.

HINTS IN PEPTONIZING MILK.—DR. BURROWS advises as follows in the London Record of May 16, 1887: As to the addition of water in the peptonizing process, adding water reduces the quantity of casein in cows' to that of mothers' milk; and besides this, serves an important office, in that *it prevents the action of the milk-curdling ferment.* If water be not added, the rennet ferment present would curdle the milk, and then subsequently digest the curd. But in this case milk may be peptonized too much, and a bitter taste will be present.

Soda.—As to the addition of sodium of bicarbonate, besides imparting to cows' milk the slight alkalinity natural in mother's milk, it affords the pancreatic digestive ferments a fluid resembling in reaction that in which they are normally active. *It also prevents the milk, if not fully peptonized, from curdling when boiled, for alkali-albumins are not precipitated by heat.*

Cold and Boiling.—It should be stated that in predigesting milk boiling is advantageously resorted to when a discontinuance of the process is desired. If a peptonizing powder be added to a pint of milk, with a quarter or half a pint of water, and the whole allowed to stand in a small pail of water as hot as the hand can bear, at the expiration of from twenty to thirty minutes the milk will be peptonized sufficiently. If the milk be *not* then set on ice or boiled, peptonization will continue slowly, and the casein finally be wholly digested. If cows' milk be boiled, at the expiration of, say twenty or thirty minutes of peptonization, the casein will assume, on the addition of acid, a flocculent, flaky character, not unlike mothers' milk. Boiling destroys all digestive ferments. From all that one can judge, the results obtained with peptonized milk are of a satisfactory nature.—*Medical News.*

HOW TO HAVE GOOD MILK FOR INFANTS.—SIMORIS, a Netherland physician, recommends cleansing the nursing apparatus of artificially-fed infants by soaking it in lukewarm water, boiling the whole apparatus for a quarter of an hour, and then allowing it to cool off gradually. He says that the rubber tubing stands this process very well, so that about a yard of it will last for a year. By this means he has almost always avoided causing dyspepsia. He calls attention to the careless practice of some mothers or nurses who add fresh milk to what is left over from a previous feeding. The attempt to sterilize milk by boiling it, SIMORIS thinks rather harmful than beneficial, since it makes the coagula of casein in cow's milk much harder to digest. Fresh milk from healthy cows is not dangerous, and a good condensed milk comes next to this in value.—*Med. and Surg. Reporter.*

The Medical Age.

Vol. V. DETROIT, AUG. 10, 1887. No. 15.

Original Articles.

ABDOMINAL SURGERY AND HOW TO LEARN IT.

BY HAL C. WYMAN, M. D., DETROIT, MICH.

The writer asks the reader to pardon the vanity which prompts him to begin his description of the technique of abdominal surgery with the story of his first introduction to the subject.

In 1872, I was a student in the University of Michigan and hoped in the course of a few months to complete my studies and receive the degree of Doctor of Medicine. In the summer of that year while visiting my home, I assisted an old practitioner, DR. R. B. C. NEWCOMB, since deceased, in conducting his practice.

My duty was to look after the poorer patients.

One day I was requested to call upon a Mrs. K., the wife of a farmer, and mother of several children. She had been sick with dropsy for several years, her friends told me. She had consulted a quack in Ann Arbor, who was notorious for curing or attempting to cure disease by some mysterious process to me unknown. He had pronounced Mrs. K.'s malady dropsy, and I never surmised that anything else could be the trouble.

On making my first visit, she was found covered by a sheet and sitting in a chair, with her knees widely separated. Her abdomen protruded more than I ever should have thought possible. Her skin had a peculiar sallow appearance. The pulse was rapid and tongue furred.

For three months she had been unable to lie down and had taken all her sleep during this time in a semi-recumbent posture.

She was in the habit of visiting the quack once every week or ten days, but for some weeks had been too feeble to make the journey of thirty-five miles.

I was told that she had been tapped by DR. NEWCOMB, some months before I saw her, and that at that time, two wooden pails of water had been withdrawn. I examined her abdomen by percussion, and found dullness well marked over the apex and front portion. There was a tympanitic area above the groin, about the crest of either ilium. There was very distinct fluctuation.

There was no difficulty in satisfying myself that the abdominal cavity contained fluid, but never supposed that that fluid was contained within a tumor or cyst, and after mature deliberation I thought the best thing to do, would be to tap again.

I was prompted to this course, particularly on account of the difficulty she experienced in breathing when attempting to rest in a horizontal position.

I used an ordinary trocar about the size of a slate pencil; pushed it through the front wall of the abdomen at a point about midway between the umbilicus, and the symphysis pubis: on withdrawing the stylet, a dark, yellowish fluid discharged rapidly through the canula. In a few moments she began to feel very much relieved, and for a short time there was no limit to the blessings she poured upon my head.

Two large wooden pails full of fluid were withdrawn in this way, and after removing the canula the patient was placed in bed. Before putting a firm bandage about the abdomen, I was surprised to find that the abdominal cavity contained a mysterious something, the nature of which I could not comprehend, yet which I knew could not belong to the peritoneal cavity. On the following day I called again, and found her about the house feeling much better, though assuring me that she felt just as well after having been tapped before and that in a few days she would probably begin to fill up as she had after the previous tapping. I told her that in such an event we would try to do something more.

Three weeks later I was called and found the abdomen again enormously distended. She was no longer able to rest in a horizontal position, was very weak and implored me to do something to relieve her. I examined the abdomen and found it in about the same condition as on my former visit. I again thought of tapping as the only remedy for her condition, and when about to undertake the operation I recollected a picture in an old surgical work, where a man was represented as having the operation of paracentesis abdominis performed. The surgeon was pictured thrusting the trocar through a small incised wound, which had been made through the abdominal integuments.

It appeared to me that by making a similar wound in this case before using the trocar, I could get a better idea of the nature of the

mysterious something, which had been found in the abdominal cavity after all the fluid had been withdrawn by the last tapping. So with the patient seated well forward in a chair, and a large dish-pan before her on the floor, with a straight bistoury, I made an incision through the integument in the median line at about the point where I had before passed the trocar.

So great was the distension of the abdominal walls, that little or no blood escaped. Before I was ready to use the trocar I was surprised to find that I had transfixed the abdominal wall and punctured a cyst, as the fluid escaped in a large stream. The pan filled rapidly and the abdomen decreased in size.

By pressing on either side of the incision, I was enabled to hasten the escape of the fluid, and when the abdomen was, I should say about half empty, I was surprised to observe a whitish substance, which I had first supposed to be intestines, protruding through the wound. This I pushed back and kept within the abdomen by the aid of the canula and my finger, while the fluid again discharged rapidly.

On withdrawing my finger to further the escape of the fluid, this white substance again protruded and the discharge stopped. Examining it minutely, while attempting to restore it to the abdominal cavity, I was surprised to find an opening in it, through which a part of the fluid was being discharged.

I was now convinced that this something was not an intestine, or any viscus proper to the abdominal cavity, and when it again protruded, I only pushed it back, and held it away from the abdominal opening with my finger to allow the fluid to escape. After the fluid had nearly all run out, the white substance again entered the wound, and I found myself unable to restore it to the cavity of the abdomen, so determined to withdraw it as far as possible.

After pulling gently upon this mass, which had wedged firmly into the abdominal wound, it began to move easily and tapered into a slender neck, along which I felt the pulsation of arteries. I now introduced my finger into the abdominal opening and followed up this neck of mysterious tissue, until I found it had its origin in the left broad ligament of the uterus. Finding no ovary upon that side, and sweeping my finger over to the right pelvic region, I had no difficulty in feeling a normal ovary, nor could I detect the least sign of disease in other parts of the abdominal cavity.

I was now convinced that I had to deal with a cystic tumor of the left ovary, and taking an ordinary silk ligature, tied it firmly around the pedicle close to the abdominal wound.

The cyst was now cut away, and the pedicle with the ligature returned to the abdominal cavity, the patient being in the meantime an interested witness of all that was done.

The abdominal wound was not over an inch and a quarter in length, and was closed by transfixing its margins, including the peritoneal surfaces, with a common darning-needle, and fixing it in position with a figure-eight ligature.

But the one needle was used, and no other sutures were employed.

I can now make the of story of this case brief, by saying that Mrs. K. progressed to a happy recovery.

At the time this operation was performed, in the manner I have indicated, I had only heard in a general way that the abdominal cavity was in very rare instances opened for the removal of tumors, but what kind, whether ovarian or otherwise, I had never learned. The work of McDowell and others, with which all young surgeons are now so familar, was to me a terra-incognita.

On returning to my studies in the University, I related to the Professor of Surgery my experience in the case of Mrs. K., and asked him in regard to the operation of ovariotomy and of its legitimacy.

He told me he had performed the operation once with fatal consequences, that it was a measure of doubtful expediency, and that the few who had done such work were called derisively by the better class of practitioners "belly rippers."

That gentleman has since become the most frequent ovariotomist in the state, and is one of the ablest advocates of the operation in this country.

I had been led into my case step by step through circumstances rather than design, but the success which I had achieved inspired me with a desire to become more fully acquainted with all its details.

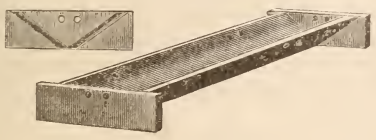
Patients with ovarian or any abdominal tumors were not numerous in the village in which I lived. I read all that the few libraries to which I had access contained upon the subject of ovarian cysts, and was surprised to find such distinguished authors as Stark, in his Allgemeine Pathologie, and the Dictionaire de Medécine with all its notable writers, had devoted but very small space to the history and treatment of ovarian tumors.

The technique of the operations of abdominal surgery of fourteen years ago, was almost limited to the descriptions of the operations for the cure of herniæ.

The fact that I had no large hospital at my command in which I could study the various diseases of the abdominal cavity, made it imperative that I should gain my information through other sources; my success in the case filled me with a desire, as strong, perhaps, as any youth has ever experienced, to perfect myself in the knowledge of the surgical diseases of the abdominal cavity, and the best means of treating them.

My first studies of an intentional character

were confined to dogs. I fixed my dog in a trap, made by nailing some boards together in a V-shape, and making holes through which to pass ropes to tie him. The boards were four feet long and ten inches wide, and were fastened to end pieces, which secured the V-shape to the apparatus. When a dog was laid on his back in this trap or trough, and his legs were tied to the sides and end pieces, he could not struggle away from the anæsthetic, nor did his movements seriously interfere with the surgical manipulation.



The diagram represents the trap in which animals for experimental study are fastened. A space for cleanliness is left in the bottom, where the inclined sides approach each other.

I had been taught, as every other medical man in that day was taught, that wounds of the peritoneum were mortal. To further test this matter and arrive at some definite knowledge of the amount of trauma which this very sensitive membrane would tolerate, I opened the peritoneal cavity of a dog, by making an incision in the median line of the abdomen. I then excised through this wound a portion of the intestine, and united the cut surfaces by interrupted sutures.

In this experiment I was guided by a description I had seen in an old surgical work, of a method of uniting the intestines, when they had been divided by wounds.

My studies were not minute and I united the cut surfaces of the gut together very much as a man would sew up a rent in his pantaloons, without much reference to the different physiological characters of the several coats of the intestines.

The dog died in a few days, and I was surprised, in making a post-mortem examination, to find a considerable quantity of the intestinal contents free in the abdominal cavity, they having escaped through the wound which I had closed imperfectly and improperly in this that I had neglected to properly consider the influence the various coats of the intestines might have upon the healing process.

I had attempted to unite two mucous surfaces together, and of course failed, because two mucous surfaces covered with normal mucous epithelium, and normal mucous membrane were never intended by nature to blend together in the healing process.

Had I pushed the mucous surface into the cavity of the bowel and carefully approximated the peritoneal surface of the wounded intestine, my success would have been complete, because as many subsequent experiments have shown, the function of the peritoneum appears to be to sustain and carry forward a large amount of plastic inflammation, for the repair of injuries to the intestines.

In the dog's case, so much had the peritoneum been inflamed by the original wound and by the contents of the intestines, which had been turned into the peritoneal cavity, that large masses of the peritoneal surfaces and intestines were glued together by huge flakes of organized lymph which had exuded from every part of the peritoneum, that had sustained any damage.

I could plainly see that nature had attempted by this copious peritoneal exudation to cover up and heal the mucous areas which I had deliberately, but not intentionally, made in the intestinal wall.

ACUTE PERITONITIS.

My next experiment was the artificial development of a general peritonitis. I was anxious to see how the peritoneum would behave when attacked with general inflammation such as I had seen described as following in the wake of operations in the peritoneal cavity.

My first experiment had resulted in a very extensive inflammation, although remote parts of the peritoneum did not appear to have been in any way affected by the injury and its consequences. So with my second dog I simply lifted the abdominal wall between my fingers to hold it away if possible from the abdominal viscera while I inserted an ordinary hypodermic syringe by means of which I injected into the peritoneal cavity about half a drachm of aqua ammonia.

This injection was followed by an exhibition of most intense pain. Every instrument of expression, every organ that was capable of indicating pain was excited to the highest degree. I could not but shudder, though moved by the most enthusiastic desire to discover a means of relieving an almost invariably fatal disease in men, at the anguish depicted by the suffering brute.

This intense pain was not for a few moments only, but continued for hours. The respiration rapidly increased in frequency. The eyes seemed to sink back into the head of the animal; as the distension of the abdomen increased with gas, a touch, no matter how gentle, upon the abdominal surface provoked a cry.

Food was not taken. Vomiting came on, increasing in frequency till the dog died, about twelve hours after the injection.

An autopsy showed the peritoneal membrane very much reddened, and a considerable quantity of reddish colored fluid free in the peritoneal cavity; the ammoniacal odor had entirely vanished.

In some parts of the abdominal cavity the peritoneal surface of the intestine was covered with flakes of adherent lymph, but the main features of the case was the considerable quantity of reddish-yellow fluid which, as I remarked before, was free in the peritoneal cavity, and which was probably the result of transudation, through the peritoneal blood-vessels, for no solution of continuity existed in any part of the abdominal cavity.

UNION OF ABDOMINAL WOUND.

My next experiment was performed upon a large-sized dog, with the object of ascertaining the best method of uniting the abdominal wound; accordingly I made a free incision and after making a thorough digital examination of the abdominal cavity, I proceeded to close the wound by sutures passed as follows: In the upper part of the wound they were made to embrace the integument and muscles at about one-half inch from their cut margin, and excluded the peritoneum, which was left to unite without the intervention of art. In the lower part of the wound the sutures were made to embrace the peritoneum as well as the skin and muscles—all the tissues of the abdominal wall—so as to bring two peritoneal surfaces in contact.

Following this operation the dog appeared quite ill for forty-eight hours, at the end of which time he seemed to improve, took more notice of his surroundings, and ate some food. At the end of a week he had developed a vigorous appetite, and pulled all the sutures from the wound with his teeth. I felt that he was thoroughly convalescent, and in order to note the difference in the two methods (extra and intra-peritoneal) of passing the abdominal sutures it became necessary to kill him. This was done by puncturing the medulla oblongata with an awl.

On opening the peritoneal cavity by a transverse incision across the front wall of the abdomen. I observed the following conditions: The lower portion of the original wound was completely closed by a firm, narrow cicatrix which showed as a straight white line. At the points where the sutures transfixed the peritoneum were small masses of lymph.

In the upper part of the wound that had been treated by the extra peritoneal method the muscles and integument being united by sutures which left the peritoneum widely asunder, the intervening space was filled with large masses of lymph which had been thrown out, to fill the gap between the cut surfaces of the peritoneum. The adjacent intestines were adherent to the wound.

The conclusions from this experiment were, that in closing the abdominal wound, it was always best to carry the needle through the integument, muscles and peritoneum, in such a way as to bring the two surfaces of the peritoneum with the cut portions of the integument and muscles in contact; also, that where the peritoneal surfaces were not approximated by sutures, there was great danger of development of hernia.

In subsequent experiments upon other animals, chiefly rabbits and dogs, I opened the abdominal cavity by making a free incision in the median line of the abdomen, dividing integument; muscles and peritoneum. These wounds I closed by approximating the integument and muscles only, leaving the peritoneum widely asunder. I found in every instance treated in this way, that large hernial protrusions followed. We may say safely that the peritoneum is a guard against abdominal hernias.

In cases of femoral and inguinal hernia, were efforts more commonly made to suture the surfaces of the hernial sac, a radical cure would more frequently follow the operation for relief of strangulation.

ABDOMINAL MUSCLES AND HERNIA.

The anatomy of the abdominal muscles is important in studying the effect of injuries of the abdomen. The way in which one set of muscles braces the other set, the fibres of the external oblique, internal oblique, and transversalis crossing at nearly right angles, makes the best possible support for the abdominal contents, and meets all the considerations of strength and mobility. If any one set of these muscle fibres be divided, the consequence is a great weakening of the abdominal wall and threatened hernia.

In the few experiments which I made upon dogs, for the purpose of ascertaining how far it would be possible to check the phenomenon of coughing, by dividing abdominal muscles, I had occasion to divide the rectus abdominis and the external oblique with a tenetome. Such wounds healed quickly and without leading to hernia, but when I divided the deeper layers of muscles with a view of further checking the action of the abdominal muscles, in a fit of coughing, the peritoneum quickly bulged out into the opening, caused by the divided muscles, and made a ventral hernia.

A knowledge of the relation of these muscles to each other is of importance for the radical cure of hernia. If pains be taken after the hernial sac is restored to the cavity of the abdomen, to split and break up the sheaths of the several muscles about the hernial openings, and sutures be so applied as to force one muscle over another muscle, one tendon over another tendon, the abdominal rings would be perfectly closed, the muscles caused to adhere together so that the cure of the hernia would be radical.

LAPAROTOMY FOR HERNIA.

A brief study of the abdominal muscles is in-

complete without a few words in regard to the operation for the relief of strangulated hernia.

The relation of these abdominal rings, so-called hernial openings, to the gut is such in the majority of hernias, that, so far as the correct method of dividing the point of constriction is concerned, very little attention is paid to, and, indeed, very little arrived at from a study of the normal anatomy of the parts.

The advice, in cases of hernias above Poupart's ligament, to divide upwards, is based solely upon the fear of wounding the arteries which may encircle the hernial sac. In the matter of femoral hernia, or hernias below Poupart's ligament, the general advice is to divide the constricting point by cutting against Gimbernat's ligament in a direction inwards and upwards. In this case the danger of wounding the femoral vein or the saphenous vein, or any of the arteries of an irregular origin, is so great and the danger which follows hemorrhage into the peritoneal cavity so certain, that the writer believes that it is better surgery to relieve the constrictions of the bowel in these cases by dividing them from the peritoneal side. To do this it is, of course, necessary to make a laparotomy, instead of opening the abdomen through the groin.

The line of safety, the median line of the abdomen, is safe because there is no danger of wounding any important blood-vessels or muscles. The constricting fibres of hernia can be more easily divided through it and from the interior of the abdomen, than from the exterior and through the important muscles.

This the writer knows, not from experiments on dogs alone, but from repeated successful operations upon human sufferers.

ENTEROTOMY FOR GUN-SHOT AND BAYONET WOUNDS.

The next subject for study is that known technically as enterotomy. It means the cutting away of any portion of the intestine which may have been rendered incapable of performing its functions.

To learn how to do this work so as to get the smallest number of failures, it is necessary to make repeated trials upon the lower animals.

Take, for example, the treatment of gun-shot wounds of the intestines. I used a small common rifle, carrying a 22-calibre ball for my experiments. I fired it so as to traverse the abdomen from right to left, aiming to fire sufficiently low to avoid the liver, and was distant about twenty feet from the dog, which was rendered quiet by anæsthesia, so that my aim was certain. After wounding the dog I opened the abdomen by a section in the median line, and found the intestine perforated in eight different places. Also two wounds in the parietal peritoneum.

Hemorrhage from some of these wounds, particularly three which transversed the mesentery, was copious, and would have been fatal, had I delayed my abdominal section longer. The hemorrhage was at once controlled by ligating the bleeding arteries. The intestinal wounds proper were treated by folding the mucous membrane which protruded through the peritoneal investment of the opening, back into the cavity of the bowel, and passing the sutures through the peritoneum in such a way as to close the wound, by approximating two peritoneal surfaces. A large number of sutures were required to close all of the intestinal wounds. After the sutures were tied the knots were cut short. The material used was fine carbolated silk.

This animal recovered and a subsequent post-mortem showed that some of the sutures had sloughed through into the cavity of the bowel and had been carried away, while others were encysted.

BAYONET WOUNDS.

Another dog received a bayonet wound, transfixing the abdomen from right to left. The weapon used was a sharp triangular-shaped bayonet, peculiar to the old Belgian muskets; its greatest diameter was about one inch.

It was carried through the abdomen of the dog to a point where the bayonet measured about three-fourths of an inch. After withdrawing it, two hours elapsed before any treatment was resorted to. Then the abdomen was opened by a section in the median line. The cavity of the peritoneum was found to contain a considerable quantity of intestinal matter, which was carefully removed, and found to have issued from four wounds which the bayonet had made in the intestinal wall. These wounds were closed by sutures passed in the same manner as in the preceding case. The wounds in the parietal peritoneum were also closed by sutures, fine carbolated silk being used for the purpose.

The abdominal section was closed with the same material.

This dog did well until the second day when he exhibited signs of serious disturbance and died the following day. The autopsy showed that the intestinal wounds were pulled up to the parietal peritoneum and that they adhered also to the sound portion of the bowel by a plastic exudate that had sealed them perfectly.

There was no escape whatever of intestinal matter into the peritoneum, the union of the intestinal wounds by suture having been absolute. Some bloody serum was present in the abdomen.

Had this operation for the closure of the intestinal wounds been made earlier, the chances of recovery would have been much greater.

VARIOUS INTESTINAL SUTURES.

A good deal of discussion has been indulged in, by various writers on intestinal surgery, as to the best kind of suture with which to unite intestinal wounds. I have made on rabbits, a large number of abdominal sections, excising a portion of the intestine and uniting the surfaces in various ways, by means of suture, with the object of ascertaining what particular kind of suture was most likely to give the best results, and secure the most perfect union of the wound.

These experiments need not be mentioned in detail, but the results established beyond doubt in my mind the fact that a suture of the intestine should pass through the peritoneum, and the fibrous coat of the intestine, and not penetrate the mucous membrane. It should begin about one fourth of an inch from the margin of the intestinal wound and should come out through the peritoneum at the edge of the intestinal wound. It should then be carried across the wound and again penetrate the peritoneum near its edge and emerge after embracing about a quarter of an inch. When it is tied, two surfaces of the peritoneum are approximated. The mucous membrane is thrown into the bowel and the cut surfaces of the peritoneum are in perfect apposition.

The sutures should be of fine material, and should be introduced at intervals of one-fourth of an inch. A suture of this kind I have never known to permit the escape of intestinal contents, and if sloughing occurs, it is most likely to open into the cavity of the intestine.

It sometimes becomes necessary to divide the intestine in its long diameter, for the removal of foreign bodies, and in that case the same principles, so far as approximating of the cut surfaces of the intestine is concerned, should be carried out.

(To be continued.)

SUNSTROKE.

BY J. D. ELY, M. D., MEDINA, MICH.

The following report of a case, which I was called to treat recently, may be of particular interest to the profession at this time.

It is worthy of record, it seems to me, because the early medical treatment indicated, and given with most happy effect, is contrary to that laid down in our text-books generally, and somewhat different from that mentioned in published reports upon the subject.

On Wednesday, July 12, 1887, Calvin Smith, a farmer, seventy-two years of age, while cutting wheat with a cradle felt that he was being overcome by the heat, and started for his house near by, on reaching which he said to his wife, "I never felt the heat so in my life; give me a drink of water." A small quantity of water was given him, and immediately after drinking it he was prostrated.

This occurred at four o'clock in the afternoon, and I saw the patient an hour later, at which time he was in a convulsion, and making it work for three strong men to hold him upon the bed, where he had been placed.

After applying cloths wrung out of cold water, to his head, giving some minor directions, and the convulsions had subsided, while preparing the medicines I wished to administer, I learned of the family the history above given, with the following particulars:

When the patient first went down it seemed a great effort for him to breathe, and that he could not, or would not, swallow anything for some minutes after. As soon as possible he was given a little whisky sling, and convulsions immediately followed, recurring every five minutes, and growing more severe till my arrival.

As observed by me, the patient's face was flushed, every blood-vessel being distended, lips of a purplish hue, eyes bright and pupils contracted.

The pulse was irregular, but full and strong, at about 120.

Respiration, irregular and sighing in character.

Congestion of both lungs very pronounced, the air at times evidently not reaching the vesicles.

During the convulsive action the patient would frequently grasp his head and chest as if suffering great pain there, and continually raved about being burned up with "liquid fire," which he imagined was being poured down his throat by some enemy.

This delusion was manifest before anything was given him and continued throughout, during the time the mind was deranged; hence it can not be attributed to the effect of the stimulant, or other medicines given, as might without this explanation be considered.

Of the treatment in addition to the application of cloths wrung out of cold water, changed frequently, I prepared and gave together, three drops each of fluid extracts veratrum viride and gelsemium semp., and five grains of bromide of potassium in water every ten minutes, till their specific effects were manifest, when they were given in smaller doses and not so often.

No more prompt and satisfactory treatment was ever witnessed by me. Before the third dose had been given, its beneficial influence was noticed, and the convulsive action, occurred less frequently, and grew less severe under its effect till they ceased entirely before midnight, the patient enjoying lucid intervals an hour or two before that.

At ten o'clock I left the patient in charge of competent assistants, with instructions to continue the applications and the medicine as seemed to them necessary, also to have ready

and administer stimulants in case any grave depression was manifest.

On my visit the next morning I found that no medicine had been given to the patient after one o'clock, but that the applications of water were continued all night.

The patient had slept from half past one till four in the morning, when he awoke somewhat confused, but was soon after able to answer all questions clearly and intelligently. Some tinnitus aurium was complained of, but no headache.

The face was flushed; eyes blood shot, and the pupils still somewhat contracted. Pulse quite regular at eighty and moderately full. Respiration still embarrassed; congestion of the lungs remaining, though not quite so pronounced. Temperature ninety-nine, and patient very nervous.

I prescribed, to take the place of the first mixture:

Fluid ext. gelsemium semp., ℥ j,
Aqua, ℨ iv.

One teaspoonful as often as necessary to control the nervous symptoms manifested; also an active cathartic of senna and jalap guarded with pulv. cloves.

Visited the patient again in the evening and found that the gelsemium had done all I expected of it, and that the cathartic had acted well.

The patient said his head felt much clearer, but complained of feeling very weak. Face slightly flushed, pupils normal, as was also the temperature. Respiration embarrassed at times, and congestion of lungs yet marked. Pulse seventy and *soft*.

Believing that stimulants and tonics were now admissible, I prescribed three-grain doses of quinine, in whisky, every three hours, and directed that, if it caused any unpleasant effect it be discontinued, and the gelsemium given as before, till my return.

The next morning, on visiting him, I learned that only two doses of the quinine and whiskey were given, as it caused the face to flush more, and the head to ache. The gelsemium had been given instead, as ordered, and the patient had good rest, and required little attention during the night, after he had a few doses of it. In answer to my inquiry the patient said "my head feels as clear as a bell this morning: it hasn't ached a bit since sunrise."

He wished to get up and walk across the room but, on trying found that he was too weak to do so.

The appearance of his face was more natural, eyes less congested and pupils normal. An occasional sighing respiration, and slight congestion of the lungs, were noticed. Pulse regular at sixty-five, soft and feeble. Temperature sub-normal.

I prescribed small doses of quinine and capsicum in capsules, and advised the taking of a whiskey sling occasionally, as a helper, if needed.

Further particulars are unnecessary as the last prescription was continued unchanged with excellent effect, and the patient is, at this writing, July, 23, able to attend to his stock, and do other light work, morning and evening.

The result of treatment is much better than was expected and is alike gratifying and satisfactory to all concerned.

I would add that, judging from my observation, and reading, of cases of sunstroke, though, in very many cases, there is great and overwhelming prostration manifested at first, and early stimulation is required, yet a great proportion (of which the case I report is typical) require sedatives instead.

If this be so, as I am led to think, it is most important to observe very particularly the condition existing in cases of sunstroke before prescribing, and then to prescribe according to the indications rather than in the stereotyped manner so common, if we would be most successful.

The remedies early required in this case were sedatives and anti-spasmodics, and the indications, manifested in the flushed face, bright eyes, contracted pupils and strong, *full pulse*, were so plain that the selection was not difficult to make. Veratrum and gelsemium being recognized among the most powerful of the class, and having proved most satisfactory in my practice, were chosen; the bromide being added also because of its well-known sedative, antispasmodic effect.

I have much confidence in veratrum and gelsemium in conditions requiring powerful sedatives and antispasmodics, and should prescribe them, regardless of the name of the disease, wherever the indications named were as pronounced as in this case, with equal confidence and certainty of success.

The appalling loss of life caused by sunstroke during the late hot wave should be an incentive to physicians to restudy the subject most carefully and, if possible, be better prepared to treat future cases more successfully.

I trust this important subject will be discussed freely in the journals during the next few weeks, and especially by those who have had a large experience in the treating of sunstroke.

WHAT IS MEDICAL PSYCHOLOGY?

BY J. E. HOFFMAN, M. D., POUGHKEEPSIE, N. Y.

In the January number of the Advocate, Dr. E. D. Evans asks, "Why not psychology and biology, as well as chemistry, in the sick-room."

The first reason is: Because neither psychology nor biology are taught at our medical in-

stitutions; second, because probably 99 per cent. of the entire medical profession know nothing of the subject. The reason for this entire lack of knowledge on so great and important a subject is twofold. The reason, as far as my experience with the profession has gone, is the stubbornness with which they generally repel all that appears mystical and incomprehensible. This, of course, does not include the "atom" of chemical science, as we know all about that, certainly (?).

The second reason is, because it is generally believed that psychology, which means a "treatise on the soul," must therefore be a religious subject, and, I am sorry to say, religion and medicine, in the present age, seem strongly antagonistic. If the profession will allow me, I will endeavor to advance a "theory" regarding this unknown force which we term "life;" but in order to do this, I will be obliged to call upon the "Book of books" for my starting point:

I. Gen. 1-2: "In the beginning God created the heaven and the earth; and the earth was without form, and void; and darkness was upon the face of the deep. And the spirit of God moved upon the water," infusing a current of life into the dead matter.

This current of life permeates the universe, and gives existence and development to *all* things. If this current of life only surrounds the dead matter, without penetrating and combining with it, it simply controls the matter and compels it to obey the laws of nature as given by God. If it combines with and penetrates matter, organic bodies are the result.

As long as it combines with and penetrates matter, it is the vegetable life which becomes developed. If, however, it not only penetrates and combines with matter, but is *individualized* and made capable of self-existence, it is the animal life which originates. It is this combining of the current of life with matter, and this becoming individualized with organic bodies, that was caused by the command of God: Let the earth bring forth. This individualized current of life, vivifying and governing our body, is what we term soul.

My idea is, that if the earth had life-giving force enough to make animals capable of a self-existence, man, who was made of the same material or substance, must have been, and is charged with, the same life-giving force as the animal.

This current of life, or life-giving force, is the animal soul, often termed animal magnetism, on account of the soul being "electro-magnetic" in its action. Why cannot we consider this force as soul in "man" also? My opinion is, that the soul in man (that is, taking the term in its true sense), is that principle of "animal life" which we have in conjunction with the animal; and this soul, or life-giving substance (which in the animal takes the entire place of "soul"), returns to the earth, from when it came.

Therefore, when God created man he created him a "living being," but, in order that man should differ from beast, in order that man should be after His image, God breathed into his nostrils the breath of life, and this breath of life is what we consider the "immortal soul:" this is what we may also call the "spirit of man."

This soul, spirit, or breath of life is that spiritual substance, which is so congruous with the human body, that, through the compatibility of the "animal soul" and the body, the entire being of man exists.

In the foregoing I have said that the "soul" is electro-magnetic, in its functions. This may at first sight appear absurd; but let us follow the subject a little further.

In the first place we know that the earth is impregnated with both electricity and magnetism, with minerals and all forms of organic and substances; and with various gaseous substances and principles, probably more or less the result of chemical action and combination.

"Man," as we have seen, has his origin from this earth so impregnated, the only difference being that these forces have been "individualized," and made capable of a self existence, through Divine grace. All our higher functions, as mind, reason, judgment, etc., being the sole result of the one distinction, we have received in preference to all other living creations, namely, the breath of life; this alone distinguishes us from all other creations.

The animal has bones, muscles, nerves, blood, the minerals and earthy salts, etc., just as we have; but it has no mind, reason, judgment, no proper understanding, nothing excepting a more or less acute instinct.

If I look at the composition of a body, be it man or beast, I am tempted to compare the entire structure to a marvelously constructed electro magnetic machine in which, to maintain the proper condition of health, a perfect chemical action and decomposition must constantly go on. Is this perhaps impossible? Do we not know from chemistry that, for instance, oxygen, chlorine, iodine, the acids, etc., are envolved at the positive electrode; while hydrogen and the metals are involved at the negative electrode of a battery.

In chemistry the terminations of a battery are called "electrodes," as by their intervention the liquid to be experimented upon is made a part of the circuit. The process of decomposition by the current is called "electrolysis," and the liquids, which, when thus treated, yield up their elements, are denominated "electrolytes."

We also learn from chemistry that not all liquids are electrolytes, many refusing to conduct, and no decomposition takes place; among

this class belong alcohol, ether, some essential oils, organic substances, etc. These all act in this manner, and completely arrest the current of a powerful battery.

Does not the same thing take place in the human system? If not, why is it that when alcoholic stimulants, ether, etc., are entered into the system, after a more or less comparatively short period of excitement, there is loss of consciousness, and a more or less complete arrest of all voluntary motion and sensibility?

It may be said, Why does not this effect last? Simply because the wonderful chemical composition of the human organism contains plenty of material to combine with these substances, counteracting their effect, and making them harmless, and finally carrying them out of the system, through the various organs of secretion and excretion. But not for always; just as the injudicious use of an instrument may and will in time place it beyond the bound of repair, so is it with this wonderful construction of the Divine grace.

The only immediate proof I have of and for this hypothesis is that we may convince ourselves by testing the different medicinal agents by the aid of a good battery.

My object in treating this subject in the way I have is simply to show the profession that psychology may be divided into two classes: medical psychology, which treats of the mortal part of man; and theological psychology, which treats of the immortal man. The medical psychology is probably what some writers term "biology," and, according to my opinion, it is necessary to make the above distinction, as the entire subject is too great for comprehension. We as medical men are compelled to advance and hold theories, which are not beyond our limit of understanding, and which may be sufficiently plain to us, to enable us to test their reliability and virtue. In chemistry the so-called "Atom" is the axis, around which the entire science of chemistry revolves, yet it is simply an imaginary term used to designate the smallest possible subdivision of any known substance. The "hypothesis" which I have adduced in the foregoing is, I believe, something more substantial, and can, I think, be fully tested as to its reliability.

A CASE OF DERMOID CYST IN A YOUNG CHILD.

BY THEODORE A. M'GRAW, M. D., DETROIT, MICH.

MARY AVRES, aged nine years, from near Maidstone, Ontario, was brought to me in the middle of May on account of a tumor in the abdomen. Her physician, a very competent man, wrote to me that he had noticed a tumor two years previously, and that it had completely disappeared under the use of a vermifuge, that it had recurred again in a year and had again disappeared on the exhibition again of a vermifuge, with the subsequent evacuation of large numbers of round worms; and that it had three months ago again made its appearance, but could not now be made to succumb to the same remedies.

Examination of the child's abdomen revealed a tumor in the median line, just above the pubes, about as large as the head of a newborn baby.

It could be felt from the rectum when pressed down into the pelvis, but with much difficulty, and was remarkable for its great mobility. It could be pushed up to the ensiform process and over into either iliac fossa, and was quite free from soreness.

The diagnosis was quite doubtful. It might have been an ovarian tumor, a parovarian cyst, a dermoid cyst, a semi-solid or cystic tumor of the omentum or mesentery, one of those peculiar cysts which spring from the persistence of rudimentary organs, or a floating kidney. It was semi-elastic to the feel and somewhat lobulated.

I operated on May 17. There were present DRS. NOYES, BOICE, ROBBINS, CLARK, and others. Through an incision in the linea alba, below the navel, four inches long, the cyst was brought into view and tapped. There ran through the trocar a quantity of dark-colored, thick liquid, in which there was a quantity of fine hair.

The tumor was evidently a dermoid cyst attached to the right ovary. The pedicle was ligated, the wound in the abdomen stitched, and the little patient put to bed. The wound healed by first intention, and the child left the hospital on June 1st.

The peculiarities of this case are, first, the history, which was entirely misleading, and, second, its entire mobility, which made its point of origin a matter of great doubt.

It is a question which might bear investigation, whether the action of remedies upon the bowels or kidneys may under certain circumstances extend to the inside of cystic tumors, causing the temporary diminution of their size. Fluctuations in the size of such tumors are frequently described by patients, and there can be no doubt that in the majority of instances such patients are deceived by the changes in the size of the bowels, caused by flatulence or purging. There are occasional cases, however, in which the surgeon has to acknowledge a doubt, as to the character of changes which evidently affect the tumor itself.

Whether the peculiar history of the case is to be attributed to faulty observations or to unusual fluctuations in the size of the tumor, is a question which must be left undecided.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, May 2, 1887.

The President, W. T. BELFIELD, M. D., in the chair.

DR. PARKES also exhibited some

URETHRAL AND VESICAL CALCULI.

This is a urinary calculus removed from the urethra, and with this history: The man says he has had trouble for six years in urination, that he has been treated a good many times for retention of urine, that he suffered great pain and distress in urination during that time. Three weeks ago he was brought to my house for the purpose of relieving him of acute retention; he had not passed urine for six or eight hours, and was in great distress. Supposing I had a case of tight stricture to deal with, I attempted to pass a very fine whalebone bougie. I passed it down the urethra and found that it struck against and was stopped by something that seemed rough. I then attempted to pass in a metallic sound, trying different sizes, but found it impossible to strike this body with any sound; the only instrument I could get in contact with it was a whalebone bougie. Then I introduced my finger into the rectum and immediately it came upon the foreign body bulging directly into the perineum before the finger entered fairly into the anus, apparently lying in a horizontal position, and so evidently in the membranous portion of the urethra. I advised immediate operation, as I could not get any instrument into contact with the foreign body. It was a new idea with the patient that he had a foreign body in this place, and he wanted to consult with his wife; he went away, and two weeks subsequently he came to me for operation. Upon examining the patient this body was now found just below the pubes. I again made attempts to come into contact with the body through the urethra, supposing I might be able to withdraw it from the urethra with the forceps, but by no effort could I bring any of my instruments in contact with. During the first examination I made efforts by means of my finger and thumb to force the body back into the bladder, but failed to do it, before advising operation. After placing him under an anæsthetic I made a direct incision and exposed the stone, which I had no difficulty in turning out. It is very hard and shaped so as to most easily follow along the course of the urethra. The urethra in front of it was contracted down to an extreme degree. The man is well. For four days he passed water through the wound in the perineum, but in less than a week he passed it through the urethra.

In another ccase I was summoned to see a man whom I found suffering great agony in the desire to pass water. The history was that he was taken with this trouble in the woods in Alabama, where he was hunting for timber, and he came to Chicago to be relieved of his trouble. Upon examination I found, half way down the penal portion of the urethra, a foreign body. I attempted to withdraw it with the forceps, but the loss of blood was severe, so I adopted this plan: without an anæsthetic, and without any assistance, I displaced the elastic integument of the viscus to one side and fixed the foreign body, and then made an incision directly on to the stone and let it out. The opening in the urethra was covered by the opening in the skin, and the man had no trouble except a slight amount of pain for a few days. The stone was about the size of the end of the finger, and was very irregular.

Three or four years ago DR. MOORE sent to me a man about sixteen years of age, with a note saying this young man had a needle in his bladder. The young man denied it, and said he had only a great deal of trouble in passing water. When the sound got into the membranous portion of the urethra it struck the foreign body. I made a good many attempts to remove it by means of forceps; I could seize the body with small forceps and withdraw it a short distance, but failed to get it any further. I followed the young man to his home and calling on DR. MOORE to administer an anæsthetic, I removed it without any difficulty by direct incision. I will say that in examining the case the needle could be felt projecting into the bladder, and probably the anterior portion of it into the membranous portion of the urethra. It is a large-sized darning needle as can be seen. The patient never passed any water through the opening of the wound; the urine was extruded from the urethra the very first day.

The vesical calculi which I have to show you embrace two stones that were removed from the bladder of a young man 18 or 20 years of age. You can see that they fit together, and have rubbed each other smooth. The young man had something of this history: I saw him when he was 14 or 15 years of age; three years before he had received an injury by a fall from a building, when he struck upon the perineum and produced a traumatic rupture of the urethra, which finally recovered, and was followed by a cicatricial stricture, for which he submitted to an operation to by DR. BOGUE, at that time. Some five or six years after that he came under my charge with a return of the traumatic stricture. They are difficult to overcome and apt to retuan. It was so tight that the smallest instrument could not be passed through it, so perineal section was determined upon. Up to this time no examination had been made of the bladder; after the division of the stricture in the perineum and the entrance into the membranous portion was made, fol-

lowed by the introduction of a small probe into the bladder, these stones were found and these two large calculi were removed from the median incision. The incision was not increased latterly in any way; they had become partly prostatic in character and had dilated this portion of the urethra to such an extent that the median incision was all that was necessary.

I show another case of calculi which is important. When I exposed it in the bladder it was in the condition you see it now, and it raises the question whether a stone is ever fractured in the bladder. This was taken from a man 67 years of age, by the lateral operation. It was found fractured into these two pieces. The man did not have any difficulty in his recovery, notwithstanding his age. He passed water through the perineum for only three days. Here is another stone. If you look at one surface you will see that it is covered with blood. When I made the examination it was impossible for me to find this stone except by passing the sound in one certain direction, and it immediately made the impression on my mind that the stone was fixed in its position. I did a lateral operation and upon entering the bladder I found that only the upper part of the stone was exposed; the lower half was imbedded in the mucous membrane of the bladder. By a considerable effort with one blade of the forceps I finally detached it from its bed. This man was 24 or 25 years of age. His wound was healed in nine days, and he was put on horseback the second week after the operation. It may be interesting to show you a specimen which illustrates the fact that the bladder may contain a stone of considerable size and for a long time without any symptoms whatever. This was obtained under the following circumstances. During my study of topographical anatomy, where I made a good many sections of the frozen bladder, I selected one patient who was not emaciated, where the whole surface shows evidence of good health. He died of pneumonia. I had his body frozen and made sections for other purposes. In making a longitudinal section through the perineum I found a stone in his bladder. It was of considerable size, as you see, but no symptoms in this patient indicated the possible presence of a stone in the bladder. It is as large as a turkey's egg, and is now in exactly the position occupied when the section was made.

Dr. Ephraim Ingals once had a case of calculus in the urethra that may be of interest in its relation to this subject, as presented by Dr. Parkes. A healthy man of about 25 years came to me, being unable to void his urine. On examining him I found the bladder distended nearly to the umbilicus, and he was in great pain. On attempting to introduce a catheter the instrument was arrested about one inch before it reached the membranous portion of the urethra. As I do not practice surgery, I sought at once to place my patient in charge of one who made this branch a specialty. I went with him to the office of Dr. Moses Gunn, who introduced a metallic catheter of medium size by the stone into the bladder, and the water was all drawn off. Considerable force was necessary to carry the instrument by the stone, and some blood followed the operation. This was near evening. The next morning I visited my patient, hoping to be able to remove the stone with forceps, but found that during the night the stone had been expelled. It was about one-half an inch long by one-fourth of an inch in diameter, of irregular contour, and rough on the surface. In three days the patient died from pyæmia. No post-mortem examination was made, but I presumed that the urethra was wounded at the point where the catheter passed the stone The practical question this suggests is: would it not have been better to have removed the stone by cutting down upon it, as was the practice of Dr. Parkes in the case he has reported?

Dr. Henry J. Reynolds exhibited a stone passed involuntarily, or rather without surgical interference, from the bladder of a woman, through the urethra. It was an extremely large stone to pass through even the female urethra, and would of course have been an impossibility in the male. The history, in brief, is as follows: In July, 1885, I was called to see the lady, aged 16, small and delicate. She had been troubled with frequent urination for two years, which ultimately became so bad that she was obliged to quit work. The symptoms gradually became more and more aggravated until two months afterwards, when they finally culminated in the passage of this stone, with much straining and pain. It is $1\frac{7}{8}$ inches long, $1\frac{1}{4}$ inches broad, and weighs 405 grains. There was no vesico-vaginal opening or fistula, but the meatus was very much lacerated and would admit the index finger readily into the bladder two weeks after the passage of the stone. The bladder was examined for other calculi, but none were found. The urine dribbled away involuntarily for several months; finally the patient became able to retain part of it, and she is now able to retain all the urine and has become quite healthy. This report may be verified by Dr. E. L. McAuliffe, of Chicago, who also examined the case.

Dr. Parkes said, in answer to Dr. Ingals' question, that he would certainly make a direct incision in every case in which there was any difficulty in removing the stone from the urethra.

Dr. Wm. T. Belfield reported a case of

TRANSPLANTATION OF AN UNDESCENDED TESTICLE.

The patient was a healthy youth 20 years of age; in his thirteenth year a small lump appeared in the right groin; during several years thereafter it increased in size, and frequently occasioned severe pain, especially during active movement. Two physicians, consulted during this period, pronounced the swelling hernia, and advised trusses; but these failed to relieve, the patient being frequently unable to work or walk for several hours.

The tumor was found, on examination, to be a fairly-developed testicle, lying upon the middle of Poupart's ligament, just exterior to the external inguinal ring; no hernia. The right side of scrotum was undeveloped. The coverings of the testicle were exposed, the organ and its cord loosened by dissection, and the testicle pushed down into the scrotum and stitched to the bottom thereof. Dressings were so applied as to prevent retraction by the short cord. The stitches, however, pulled out. After healing the testicle was found, freely movable in its tunic, at the upper portion of the scrotum, just below the pubic arch. The patient attends to his duties with perfect freedom from pain and discomfort. This appears to have been one of those unusual cases in which a testicle, retained in the inguinal canal until puberty, resumes at that period interrupted descent. Such tumors may easily be mistaken—as was this one—for hernia.

Correspondence.

CONSTIPATION IN KANSAS.

I don't know how it is in other States, but I do know that constipation is the bane of the Kansan—man or woman. There have been a great many attempts made to arrive at the cause. Some have said that it lies in our intense lime water, and others that prohibition is the cause. I have learned that we have two very prevalent forms of malarial trouble here—one is characterized by intense constipation the other by diarrhœa. When there is constipation we invariably have backache or headache. I have frequently had cases come to me complaining of great pain in the lumbar region and they generally think they have some terrible renal disease, but I soon satisfy them that there is no trouble in the kidneys except a transient hyperæmia due perhaps, to the stimulating effects of too much "Safe cure." I have noticed in many cases an absence of the headache when the backache was marked and have come to the conclusion that when there is headache it is evidence of gastric trouble enough to be reflected to the fifth pair—the roots of the pneumo-gastric and 5th being interwoven. I think it rational to believe that these gastro-intestinal troubles can notify the physician of their presence by symptoms at the periphery of the fifth, and I have a treatment for this trouble that has given me good reliable results. When there is simple constipation with either back-ache or headache or both, malaise and tired feeling all over, I find the tongue coated and temperature below normal. I prescribe pil. hydrarg. gr. x in capsules to be taken at bed time, and follow up with

Quininæ sulphatis gr. xxx.
Capsici pulvis, gr. v.
Ferri redacti. gr. x.
M et. ft. caps. no. viij.
Sig. One every 3 hours until all are taken.

I have the patient then take as follows:

℞ Ext. colocynth. co., gr. xxx.
" nucis. vom. gr. xx.
" belladonnæ, gr. vii.
Ol. caryophyl. ℥xxx.
Met. ft. pil. no. 30 in capsules.
Sig. Take one night and morning until the bowels are regular; then one as needed to keep them correct.

This almost invariably cures the constipation and relieves all aches and pains, but occasionally I find cases in which the headache persists even after the bowels are regulated. I then add to the above prescription gr. xv. of a reliable preparation of ext. cannabis indica. Sometimes when the above formula fails to reach the constipation I give ex. nux vomica fl. gtt. v to viii, 3 times a day and have found it a very good drug.

J. Z. Scott, M. D.

Scandia, Kan.

ENLARGEMENT OF PROSTATE AND CYSTITIS.

I think I have found out something new in enlargement of the prostate and cystitis. It is to irrigate the prostate and base of the bladder with a double-eyed catheter per anum with simple hot water. It works well. Like similar applications to the uterus it requires to be well done.

For cystitis also I have found turpentine stupes of decided benefit, applied until a substitutive irritation of the bladder was produced by absorption of the turpentine, then change to flaxseed poultices. It acted well in my last case. I also ordered absolute rest and a strict milk diet.

James Vercoe, M. D.

Mount Vernon, Wash. Ter.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., AUG. 10, 1887.

Editorial.

THE BERGEON TREATMENT AND PNEUMATIC DIFFERENTIATION.

The enthusiasm aroused by the claims of the advocates of rectal injections of sulphuretted hydrogen gas as a remedy for phthisis has sufficiently subsided to permit a dispassionate estimate of the value of the remedy. In popular parlance, the treatment was boomed with great vigor for a time, but it has now settled down to its legitimate value. It is to be feared that the hope which consumptives based on it have not been realized, and that these unfortunates must suffer and die as before, although, doubtless, some may find relief from the newer method as some have received and will continue to receive relief from the method of treatment employed in the beginning. The one fact which has been developed out of the recent excitement in connection with the BERGEON treatment is that the specific for phthisis has not yet been unearthed.

Pneumatic differentiation which preceded BERGEON'S method in the consideration which it received at the hands of the profession, while not attracting so much attention, owing, probably, to the cost of the necessary apparatus, nevertheless presented big hopes in certain quarters. It, too, has found its level and we have been quite interested in a tabular statement of the comparative value of these two later additions to the physician's armamentarium for consumption, as prepared by DR. JOHN A. ROBISON, of Chicago:

"Since the discovery by KOCH of the bacillus tuberculosis, the leading minds of the profession have been actively at work trying to formulate some mode of attack by means of which this foe to health may be routed. The presence of this bacillus has been acknowledged by nearly all pathologists to be positive proof of phthisis. Of course there has been a difference of opinion as to whether the bacillus is the cause of tuberculosis, or whether it is simply a bacterium which only thrives in tubercular soil. In accordance with these two theories there have been formulated two methods of treatment; first, to introduce directly into the air cells an antiseptic and germicide with the double object of killing the bacillus and rendering the native soil unfit for habitation; second, a method of treatment has been inaugurated in which the sole purpose is to cause the habitat of the bacillus to be so changed that it cannot thrive. The first method is called pneumatic differentiation, the second gaseous enemata or BERGEON'S treatment.

Both methods of treatment are highly endorsed by leading members of our profession. Remarkable results, acording to the reports of the observers, have followed the use of each treatment. From different medical journals I have compiled the following statistics, adding to them records of the results of cases I have treated myself:

CASES TREATED BY PNEUMATIC DIFFERENTIATION.

REPORTED BY—	No. Cases.	Died.	Improved.	Unimproved.	Recovered.
H. F. Williams	28	10	9	5	4
—— Jansen	1	0	0	0	1
C. B. Herrick	1	0	1	0	0
H. V. Ruck	6	0	6	0	0
V. Y. Bowditch	18	0	10	7	1
Sidney A. Fox	34	7	17	10	0
J. H. Blanks	12	4	5	2	1
—— Houghton	29	7	8	6	8
J. A. Robison	27	8	1	17	1
Total	156	36	57	47	16

CASES TREATED BY GASEOUS ENEMATA.

REPORTED BY—	No. Cases.	Died.	Improved.	Unimproved.	Recovered.
E. T. Bruen	25	0	24	1	0
S. J. Crane	2	0	2	0	0
—— Dana	3	0	3	0	0
—— Weaver	2	0	2	0	0
W. T. Belfield	1	0	1	0	0
C. M. Fitch	16	0	15	1	0
—— Henry	14	2	8	4	0
J. A. Robinson	21	6	5	9	1
Total	84	8	60	15	1

From these statistics we can make the following mathematical deductions: Of the cases treated by pneumatic differentiation 23 per cent. die, 35 per cent. are improved, and 30 per cent. are not improved, while 10 per cent. recover. Of the cases treated by gaseous enemata 9 per cent. die, 71 per cent. are improved, 15 per cent. are not improved, while only 1 per cent. recover. A glance at these figures would lead one to render a verdict in favor of gaseous enemata. And it is probable that if the present craze for BERGEON'S treatment prevails longer the statistics will show a much larger percentage of recoveries. But it would be manifestly unjust for us to render a verdict on the above

figures. It will be noticed that the percentage of improvements by gaseous enemata is 71 per cent., and by pneumatic differentiation, 35 per cent. But the fact must be remembered that the improvement under the gaseous treatment is often temporary. Dr. Fitch writes: "In every case the improvement, though rapid at first, has been partially or entirely arrested after a time." Dr. William Pepper, of Philadelphia, says: "This method of treatment is seldom of real benefit, although it is occasionally of benefit by relieving certain symptoms." Therefore, we must conclude that very faulty deductions may be made from statistics. My object in thus going into detail is to enter a protest against the fashionable method of reasoning now so prevalent among physicians. They keep records of a certain number of cases for a limited period, and observe that certain results follow and straightway jump to the conclusion that these results are due to the treatment instituted. I insist that to be of any value statistics must be carefully kept for a number of years; then they may be reviewed, corrected, and an unbiased judgment passed on them. Conclusion: Statistics in regard to pneumatic differention and gaseous enemata are at the present time worthless.

Then how shall we judge of the value of these treatments? Simply by the action that is obtained on each individual patient. We must follow the same rule in the administration of these agents as in others. We must take into consideration the age, sex, social condition, mode of life, occupation, etc., of the patient; the stage of the disease and its symptoms, and the results which follow the treatment in each case, irrespective of those in other cases. In this way we soon learn to discriminate between the cases and can to a degree of positiveness, tabulate the cases in which these methods of treatment are useful. In my experience the respective treatments have been useful in certain classes of cases. The pneumatic cabinet in my hands has proven a very valuable adjunct to the treatment of catarrhal affections of the naso-pharyngeal and bronchial passages, and has proven excellent for calisthenic purposes in cases of deficient expansion of the chest, chronic pleurisy without effusion, and cases of emphysema. But unfortunately for me I have never obtained permanent benefit in cases of phthisis pulmonalis, except in a young woman who had incipient phthisis. For this reason I have discarded the use of the cabinet in the treatment of phthisis pulmonalis.

The cases in which gaseous enemata have proven of benefit have been those in which the disease was in an advanced stage, and the symptoms were anorexia, profuse expectoration, fever, night sweats, emaciation, and in some cases diarrhœa. In nearly every case there has been a slight improvement for a few hours, but in only five cases has there been a prolonged benefit. In one of these cases, on admission to the hospital, his temperature was 104° F. He was placed on the gaseous treatment and no antipyretics were given. From March 12 to April 10 his temperature ranged from 101° F. to 104° F. Since April 10 he has been 99° F. or below. This may be a coincidence. The treatment has resulted in these cases in increased appetite and weight, cessation of night sweats, oftentimes disappearance of the diarrhœa, and lessening of the expectoration. In many cases the action of the gas was hypnotic. Alas! these results have proven temporary in nearly every case. But when we were successful in obtaining these results the patient expressed such a sense of relief, and especially was delighted at the thought of not taking *so much medicine*, that we became firmly convinced it is the duty of the physician to resort to the treatment in these cases even when he can offer no hope of a permanent cure."

Notes.

The Gross Medical College, is the name of a department recently organized in the Rocky Mountain University, at Denver, Colorado. This will make two medical colleges in Denver, which, being a city of 80,000 inhabitants, will hail this second college as a long-felt want. How it is that a city like Detroit, with over two hundred thousand inhabitants, manages to exist with but one medical college, is one of the mysteries of this progressive age. To supply the hiatus, however, an able-bodied effort is even now being made to deliver the medical department of the University of Michigan to this city, but there are so many officious and more or less perverse ones at the accouchement, that it is feared that the scheme will die abornin'. Some of the Ann Arbor faculty who in their youth fondly dreamt of the removal of the medical department of the University to Detroit, now that they are in the sere and yellow leaf, oppose the removal with all their remaining vitality, and as they have a "strong pull" on the Regents it is believed that while they live Ann Arbor will continue to contain its medical school. This probability of the proposed removal is too vague to warrant anything like a discussion of its merits or demerits.

N. Y. Medical Journal: "The Chicago Inter-Ocean having complained, rather unnecessarily, we think, that the Canadians do not recognize American degrees as a title to practice in the Dominion, the Canada Lancet pub-

lishes a very judicious editorial article in which it sufficiently explains that in this fact there is no real occasion for ill feeling. It carries its frankness so far as to acknowledge that the better American schools are superior to those of its own country, but it adds, quite correctly, that there are other American schools which are so far below the Canadian standard that, without an invidious distinction being made, it is impossible for the Canadians to register American practitioners on the mere ground of the degree. On the other hand, the Medical Press and Circular, of London, grumbles about the number of German doctors who make incursions into the United Kingdom for the purpose of drumming up remunerative practice. Whereupon the Deutsche Medizinal-Zeitung pointedly remarks: 'Und Mackenzie?'"

We are grieved to learn that our esteemed contemporary, the Medical Record, is soon to be no more. We derive our information from the Medical Register, quoted by the Medical Bulletin. Our readers are, of course, all familiar with the Medical Register and the Medical Bulletin. The Register intimates that the "pride, intolerance and egotism" of the Record, which for a time passed for learning and ability, have just about consumed it, and that the end is near. We are very sorry, indeed, to learn that the case is so far advanced and that the prognosis is so unfavorable. Let us hope that the *vis medicatrix naturæ* may leap into the breach and avert the direful catastrophe. Pride, intolerance and egotism don't always threaten the existence of a medical journal. We know of Philadelphia journals which claim to be very vigorous.

The Medical and Surgical Reporter says it is almost pathetic to observe the way in which the following item from the American Medical Journal is going the rounds of the medical journals: "A newspaper in Illinois recently brought suit against forty-three men who would not pay their subscriptions, and obtained judgment in each for the full amount of the claim. Of these, twenty-eight men made affidavit that they owned no more property than the law allowed them, thus preventing attachments. Then they, under the decision of the Supreme Court, were arrested for petty larceny, and bound over in the sum of $300 each. All but six gave bonds, while six went to jail. The postal law makes it larceny to take a newspaper and refuse to pay for it."

Mr. Lawson Tait is evidently not carried away by the prevalent veneration for all things German. He studied the language some twenty years ago, expending "infinite labor" on its acquirement. He now regards this as thrown away. "The German mind," he says in a recent address, "at least the German medical mind, is essentially different from the mind of the Briton. It not only evolves from its own consciousness descriptions of things other than the proverbial camel, but it so wraps up its grain of wheat in such a bushel of chaff that the labor of getting a meal is intolerable. Nothing pleases it so much as metaphysical speculation, while we (the English) on the contrary, are eminently pragmatic."

Dr. C. H. A. Kleinschmidt, of Washington, D. C., secretary of the Local Committee of Arrangements for the International Congress, is out with a statement that the assured attendance at this great international gathering is already so great as to render the fund secured for the reception and entertainment of guests entirely inadequate. He appeals to the patriotism of the American profession in the emergency. Any physician who feels that he ought, and is able to contribute to the increase of this fund will find a recipient in Dr. C. W. Franzoni, member of the Finance Committee, Washington, D. C.

The number of base ball "cranks" in the profession of this city, can be partially conjectured from a close inspection of the grand stand on the occasion of a league game. Time was, and not many years ago either, when attendance at a game seemed to demand some sort of an apology. Now, however, "no bones are made of it," and prominent members of the profession vie with the proverbial small boy in their manifestations of pleasure at a fine play. We cannot but believe that they are the better for it, and next to participating in a game the watching of a spirited game is the best thing a weary practitioner can do.

It is reported of Dr. Matthews Duncan, the noted Scotch gynæcologist, that he was consulted on one occasion by one of your knowing patients who commenced by telling him that she had so much trouble with her mucous membranes. "Tak' her awa', tak' her awa'," roared the surgeon in his choicest Doric. He refused to have anything to do with a woman who knew that she had mucous membranes. The American gynæcologist who would refuse patients because of their intimate acquaintance with the minute anatomy of their sexual and genital apparatus, would die of starvation.

The Medical Record receives cable messages from Dr. Mackenzie, of London, apprising it of the condition of the throat of the Crown Prince of Germany. From the message published in its issue of the 6th inst., it declares that everything appears favorable, save a

marked tendency to recurrence of the disease. This tendency to recurrence is sufficient to excite suspicion of ultimate malignancy, and until it becomes less marked there will remain anxiety as to the final outcome of the laryngeal difficulty.

We desire to return our most cordial thanks to the secretaries of the various medical colleges of this country who have up to this date so kindly furnished us with copies of their several announcements for 1887–8. The announcements for the coming session are quite up to those of past sessions. In some instances, indeed, we observe marked improvement in the typography and the quality of paper employed, and we note with pleasure this evidence of the advancement of the cause of medical education. Let the good work go on!

Our Australian antipodes are a very progressive people. For some time the advisability of introducing their system of voting has, for instance, been considered by certain states of this Union, and now comes a further evidence of the advanced degree of their enlightenment: the advertisement of practitioners of medicine that they will bear half the burial expenses of any patient who may die under their treatment. To such a combination of the business with the professional the practitioners of this country are far from being advanced.

In an editorial in the Journal of Obstetrics DR. ROBERT P. HARRIS, of Philladelphia, undertakes to show that the cow, by means of its horn, has been more successful in performing Cæsarean section than have the skilled specialists of New York city. In eleven Cæsarean operations performed in the latter city, two women and three children have been saved, while out of nine hystero-laparotomic rips by the cow five women and five children have survived. This is certainly a scathing commentary on "scientific abdominal surgery."

Following the medical college sessions of 1890-91 the term "medical colleges in good standing," as used by the Illinois State Board of Health, shall apply only to such colleges as require four years of study, including attendance on three regular courses of lectures, as a condition of graduation. This is a bold move on the part of the Illinois Board of Health and we fear it will not succeed in maintaining its position on the question.

A reader from the far west was in need of an assistant and he was rash enough to announce the fact in the department of the AGE devoted to such notices. He now writes us that unless the "ad." is discontinued he will be obliged to hire an extra correspondence clerk. He has received replies from every state in the Union.

Among the inferences to be drawn from this fact none stands out in bolder relief than the one that the AGE is a very widely-read journal.

The weather during the past two months has been quite unprecedented in this latitude for the length of the duration of its heat. Notwithstanding this prolonged heat, however, sickness has not been very prevalent, owing, doubtless, to the dryness of the atmosphere. It is, therefore, very fortunate that during the season for physicians' vacations the opportunity for getting away from work is so favorable.

The Turin Academy of medicine, having charge of the RIBERI prize, of 20,000 francs, have selected as the subject for competitive essays. "Researches on the nature and prophylaxis of one or more of the infectious diseases affecting man." Competitors will have until December 31, 1891, to present their papers, the language of which must be either Latin, French or Italian.

In reply to a correspondent we would state that the requirement for the practice of medicine in Michigan is the registration by the physician of a diploma issued to him by a medical college, presumably in good standing. This registration shall be made with the clerk of the county in which the applicant desires to locate, and costs fifty cents.

Tyrotoxicon has found its way into several lots of ice-cream this summer, and has worked its own peculiar effects on the eater. It will become physicians, at this season of the year, to bear in mind the similarity between the reported symptoms and those of cholera infantum.

The remarkable intelligence has reached this office that in Hancock, Stephen Co., Minn., there is no doctor. The only druggists, MESSRS. GRAY & SMITH, believe the opening to be a good one and they will, doubtless, soon be inquired of in regard to the matter.

The number of medical journals published in different parts of the world is now over seven hundred, and is being steadily added to—such are the increasing number and intelligence of those for whom such literature is issued.

Uncle Pete sees "some kin' o' misdecomposishun in all dis talk 'bout babies cuttin' teef." Among his kind of people, "hit looks more's if de teef war cuttin' de baby."

Medical Progress.

TREATMENT OF CHOLERA INFANTUM IN THE PHILADELPHIA HOSPITALS—HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.—DR. LOUIS STARR, in the treatment of entero-colitis in the clinic for children, gives great prominence to the hygienic management. The following points are insisted upon:

a. Fresh air must be secured by taking the child to a public square in the cool of the morning and evening, or, better still, by a morning or evening trip on one or the river steamboats The heat of the day must be spent in as cool a room as can be had. Coddling is discouraged, as many a stout mother has hastened her infant's death by too fond and constant nursing in the arms.

b. The clothing must be as thin as possible, provided, always, that woollen be worn next the skin.

c. Twice, or three times a day in very hot weather, the whole surface of the body must be sponged with water at a temperature of 80° F.. and dried with gentle rubbing. The addition of rock salt renders these baths more bracing. Full warm baths must supplant the cold spongings if there be much prostration.

d. Diet most carefully regulated as to quality, quantity, and intervals of administration. Sound cow's milk must form the basis of the food in bottle-fed babies. Fairchild's peptogenic powder is very useful in artifical feeding.

Medicinal treatment varies with the case. Should the patient be seen early in the attack, it is initiated by a laxative. A teaspoonful of castor oil with five drops of paregoric, or the same quantity of spiced syrup of rhubarb, is sufficient for an infant of one year. Afterward, while the stools are yellow, homogeneous, and not very frequent, alkalies and astringents are employed, as:

℞ Sodii bicarb., gr. xxxvj.
Syrupi rhei aromat., f ʒ ss.
Misturæ cretæ, q. s. ad f ʒ iij.
M. S.—One teaspoonful every two hour for a child of one year.*

When the stools are frequent, green, and acid in reaction, small doses of opium are added to the alkali; for example:

℞ Tr. opii deod., ♏vj.
Bismuthi subcarb., gr. lxxij.
Syrupi, f ʒ ss.
Misturæ cretæ, q. s. ad f ʒ iij.
M. S.—One teaspoonful every two hours.

At the same time, the skin of the whole abdomen is reddened, two or three times a day, with a weak mustard draught—one part of mustard to five of flour.

If the evacuations be liquid and contain whitish or greenish flakes, and the above treatment fail after a fair trial, good results often follow a short mercurial course; thus:

℞ Pulv. ipecac. comp., gr. ij.
Hydrarg. chlorid. mit., gr. ½.
Cretæ præparat., gr. xxxvj.
M. et ft. chart No. xij.
S.—One powder every two hours for twenty-four or twenty-eight hours, or until the stools become yellow and homogeneous.

* All prescriptions given are calculated for this age.

Should the stools be frequent and serous, more powerful astringents are used, as aromatic sulphuric acid, nitrate of silver, or oxide of zinc.

When the stomach is very irritable, rectal injections are resorted to, the drugs used being tincture of opium, nitrate of silver, and ipecacuanha. Ipecacuanha is chosen when there is much tenesmus with the discharge of blood and mucus. It may be administered as follows:

℞ Ext. ipecac. fld., ♏xij.
Tr. opii deod., ♏viij.
Mucilag. acaciæ, q. s. ad f ʒ ij.
M. S.—Inject one tablespoonful every four hours.

Stimulants—wine of pepsin, brandy, or whisky—are given when there is prostration.

In cases of recovery, the diet and hygiene are carefully watched untill all danger of a relapse has passed; the astringents, etc., are gradually dropped, and digestants and tonics ordered.

The antiseptic treatment recommended by L. EMMETT HOLT has lately been tried with good results. It embraces the careful attention to regimen already alluded to, preliminary evacuation of the bowels with castor oil, and the administration of naphthalin. The latter is usually ordered as follows:

℞ Naphthalin,
Ground coffee, ää gr. vj.
Sugar of milk, gr. xxiv.
M. et ft. chart No. xij.
S.—One powder ever two hours.

In the whole conduct of our cases, the greatest care is taken to avoid locking the bowels.

PHILADELPHIA HOSPITAL.

DR. JOHN M. KEATING holds that the question of summer complaints may be considered under tnree heads, viz., simple indigestion, the inflammatory form, and the septic. These may be distinct, or they may be combined in the same case.

Too little stress has been laid upon the inherited feebleness of the digestive organs in many children. One is often surprised at the failure which meets the attempt to bring up a child on the bottle, notwithstanding every precaution be used. In these cases the digestive function is at fault—the infants are dyspeptic. Every child is a study in itself. Family idiosyncrasies have to be taken into consideration. "Bringing up by hand" is a science, and cannot be left to the nurse, however faithful and accomplished she may be.

At this time of the year, the simpler forms of diarrhœa are due to indigestion. The child is enfeebled by the intense heat, the teething process irritates its nervous system or affects its mucous membranes; the stools become frequent and watery, become green or are at times colorless, and then there are flatulence and pain. If the baby be in the city, these symptoms may come on suddenly and with great intensity; there may be, also, vomiting and fever, with evidence of cerebral excitation. The treatment of such a case should be as follows: Absolute rest; the child should be kept in as cool a place as possible. *Its bottle should be stopped at once*, and for a few hours its diet should be limited to cool gum-arabic water, with lime-water, wine whey, if there is much prostration,

or a small amount at a time of Valentine's beef juice, with wine of pepsine. Toast water, or egg-albumen water, may be used to vary the diet if the attack persists for several days. Counter-irritation by hot foot-baths, flannels saturated with essence of ginger, or spice poultices to the abdomen, are very useful; and the gums should always be examined, and lanced if necessary, or the child should be given a soft handkerchief, soaked in ice-water, to suck or bite on. As for the medicinal treatment, we should use those preparations that allay gastric irritability.

℞ Hydrarg. chl. mitis, gr. $\frac{1}{12}$.
Ext. pancreatis, gr. j.
Sodæ bicarb., gr. j.
M. One every hour.

This Dr. Keating has found to be of great service; or,

℞ Bismuthi submit., gr. j.
Pepsini sacch., gr. ij.
Pulv. aromat., gr. j.
M.

But, and this is very important, if there be vomiting, and the passages contain curds, he would give

℞ Hydrarg. chl mitis, gr. $\frac{1}{12}$.
Pulv. ipecac., gr. $\frac{1}{24}$.
Sodæ bicarb., gr. j.
M.

One every half hour till six are given, and then the following every hour until the stools are free from curds and normal in color:

℞ Ol. ricini, gtt. x.
Pulv. acac., gr. ij.
Syr. rhei aromat., gtt. v.
Spts. vini gal., gtt. x.
Aquæ menth. pip., q. s. ad f ℥ ij.
M.

Should there be much flatulence, mucus in the stools, straining, vomiting, and fever—in other words, the symptoms of entero-colitis—the castor-oil prescription is the one to be preferred, and he advises the salicylate of soda in half-grain doses to be incorporated with it.

When the stomach is very irritable, all feeding should be avoided by the mouth; and in such cases an enema of gum-arabic water with the yelk of an egg, about two ounces every three hours, immediately after a stool, may be given till the stomach is tolerant. When the bottle is resumed he advises boiled milk prepared with arrowroot or rice in small amounts.

He uses wine whey freely in cases where there is much prostration, made less laxative by mixing with toast-water or gum-arabic water. The mucous membranes certainly are effected by the heat as well as the serous membranes, and on that account the temperature of these cases should be watched and controlled by refrigerant measures, or even quinine or antifebrin. Undoubtedly a large proportion of cases of summer diarrhœa are due to some septic influence, especially when they assume the choleraic form. The suddenness of onset, the evidence of vasomotor paralysis, the exhaustive discharge, call for immediate treatment of the most energetic character. The mild, unirritating diet which has just been outlined should be rigidly enforced; without it, medicinal treatment is of little avail. The child should be frequently sponged to keep the temperature and the skin active. Sweet spirits of nitre should be used to keep the kidneys active and as a sedative; and if the pain seems severe and the movements are watery and frequent, the following may be given at intervals of one hour:

℞ Hydrarg. chl. mitis, gr. $\frac{1}{12}$.
Pulv. Doveri, gr. ½.
Sodæ bicarb., gr. j.
M. Ft. chart. j

Should there be vomiting and a profuse serous diarrhœa with pain, the following will probably answer better:

℞ Morphinæ sulph., gr. ¼.
Acid sulphuric aromat., gtt. xxxij.
Spts. vini gallici, ℥ j.
Syr. acac., f ℥ ss.
Aq. menth. pip., q. s. ad f ℥ ij.
M. Teaspoonful every two hours for a child a year old.

Or, if there is any reason to contraindicate morphia, use the following:

℞ Sodæ salicylat., gr. viij.
Spts chloroformi, gtt. xxxij.
Syr. zingib., ℥ j.
Syr. acac., ℥ ij.
Aq. menth. pip., q. s. ad f ℥ j.
M. Teaspoonful every hour. Shake well.

If in these cases the vomiting still persists, the following has served a good purpose:

℞ Sodæ salicylat., gr. j.
Bismuth. subnit., gr. j.
Pulv. acaciæ, gr. ij.

Repeated every hour; and sustain the child by very small quantities of wine whey—not more than a teaspoonful at a time.

When excellent and powerful astringents and opiates are required, use the following:

℞ Tinct. kino comp.,* gtt. xl.
Syr. rhei aromat., f ℥ j.
Spts. vini gallici, f ℥ j.
Spr. acaciæ, q. s. ad f ℥ j.

Sig.—Teaspoonful in water after after every movement; and this formula can be varied by adding bismuth salicylate, or chalk if necessary, or dilute or aromatic sulphuric acid.

In all cases of cholera infantum the antiseptic treatment is the most valuable, using creasote, carbolic acid, resorcin, calomel, corrosive sublimate, p. r. n.

Dr. Keating is one of the first to advocate the use of the salicylate of soda in this form of diarrhœa, using salicylic acid in half-grain doses with the preparation known as soda mint. Its advantages are that it is cholagogue as well as antiseptic.

EPISCOPAL HOSPITAL.

Dr. P. F. Henry, in the treatment of summer diarrhœa, believes intestinal antisepsis to be an important indication. Convulsions, or other symptoms of profound intoxication, occurring at the outset of such an attack, may be reasonably attributed, in the absence of direct

* This preparation, well known in Philadelphia, contains gum camphor and opium.

chemical proof, to the presence of tyrotoxicon or other poisonous ptomaines, in the ingested food. The same symptoms occurring at a later stage are more probably due to the formation of such substances in the intestine, for it is established that they are produced in abnormal quantity in catarrhs of the gastro-intestinal tract. Whether introduced from without or formed within, an attempt should be made to prevent their disastrous effects upon the system. With this object in view, he has recently prescribed, with excellent results, the sodium salicylate, as recommended by DR. EMMETT HOLT, of New York. He gives it with bismuth, as in the following formula:

℞ Bismuth. subnitrat., ʒ j.
Sodii salicylat., ʒ ss.
Syr. acaciæ, ʒ j.
Aquæ, q. s. ad ʒ iij.
M.

For a child of from one to three years of age, a teaspoonful may be given every two or three hours. For older children, able to swallow a pill, thymol, which is undoubtedly one of the best known intestinal antiseptics, may be administered. It may be given in doses of one grain three or more times daily. It is very insoluble, and is best made into a pill with medicinal soap.

With reference to the still more important question of diet, it is sometimes necessary for a child to abstain for a time from its customary supply of milk, and live on mutton broth, clam juice, and barley water. In certain cases, milk appears to undergo changes which render it irritating to the bowels, and poisonous to the system. A substitute for milk may be found in some one of the numerous foods for infants, of which the soluble food of Carnrick is one of the best.—*Med. News.*

CARBONATE OF LIME IN CANCER.—DR. HOOD, in an article on "The Administration of Carbonate of Lime as a means of arresting the Growth of Cancerous Tumors," says: Nearly twenty years ago the Lancet published a communication from me on the value of carbonate of lime in the form of calcined oyster-shells as a means of arresting the growth of cancerous tumors, and I am anxious once more to call attention to the subject, and to urge upon those who possess the necessary facilities that a more extended trial should be given to this agent than it appears yet to have received. My own opportunities of employing it in suitable cases have not been large, but the results which I have witnessed have been sufficiently remarkable to justify me in seeking for them a more extended publicity. In the paper referred to I related in detail the case of a lady nearly 80 years of age, who was the subject of scirrhus of the breast and in whom the growth sloughed away and left a healthy surface after a course of carbonate of lime, administered in accordance with a recipe which was current in her family. She manufactured her carbonate of lime by baking oyster shells in an oven and then scraping off the calcined white lining of the concave shell. The substance thus obtained was reduced to powder, and as much as would lie on a shilling was taken once or twice a day in a little warm water or tea. It was said that perseverance for at least three months was necessary before any good result was to be expected. I presume that the powder would be almost pure carbonate of lime, but it might possibly contain a small admixture of iodine. The immediate cause of the publication of my paper was a conversation with Mr. (now Sir) SPENCER WELLS, to whom I related the particulars of the case above mentioned, and of one or two others which had fallen under my notice, and who suggested that the beneficial action of the powder might be due to the lime it contained. He told me that he had used lime largely in the treatment of uterine fibroids and other tumors, and that he was convinced that processes of atrophy and calcification resembling the spontaneous change or degeneration sometimes observed in them were often produced or promoted by its action. He added that he believed the change commenced in the coats of the arteries, by which the tumors were supplied with blood, and that these coats underwent first an atheromatous and subsequently a calcareous degeneration, in either case with a diminution of the calibre of the vessel and a lessened capacity for the conveyance of blood.

After the appearance of my paper I was applied to by several persons, with an inquiry as to whether their cases were suitable for the employment of the remedy; but in most of these instances I subsequently found that it had been taken for only a few weeks, and then abandoned because no result was apparent. I should not hope for manifest benefit in any instance under three months of persistent treatment. A notable exception to the ordinary want of perseverance was furnished by the wife of a physician practising at Reading. This lady was the subject of a well-marked scirrhus of the breast, which I had myself an opportunity of examining. After a fair and persistent trial of the calcined shell powder for three months, her husband reported to me that "the tumor had ceased growing and that she suffered no pain." She continued to take the powder for several months longer, and for several years her husband paid me an annual visit, always giving the same account: "that his wife never suffered any inconvenience or pain from her disease, the progress of which had been stopped."

The ordinary history of true cancer is such a dismal record of failure, that I think even a few instances in which benefit has been derived from a harmless remedy should encourage the profession to make trial of it in all suitable cases It would probably be inexpedient, generally speaking, to disclose the nature of the medicine, and the public mind is by degrees becoming permeated by the knowledge that many important medical actions can only be gradually produced. We have no difficulty in inducing patients to submit to prolonged courses of mercury in the treatment of syphilis, and there is no reason why they should not do the same in a malady which, if possible, is even more formidable. Up to the present time the narratives of cures of cancer have been chiefly suggestive of errors of diagnosis, and no assurance of the value of any proposed remedy can be obtained until it has been used in a sufficient number of instances to exclude the possibility of such errors having been committed in the majority of them. Although the experience of SIR SPENCER WELLS with fibroids points to

the probability of a beneficial action upon soft and vascular growths, those which I should myself select for the purpose of further investigation would be typical examples of breast scirrhus, adherent tumors of stony hardness, attended by retraction of the nipple and lancinating pain. About the nature of such it would seldom be possible to entertain a doubt. As an example of the uncertainty which may overhang the true characters of growths which do not present the symptoms above described, I may mention that I was once consulted by a lady living in the north of England, who had a swelling in her breast which had been pronounced to be cancer by her family medical attendant, and also by two consultants called in from the neighboring town. She was urged to submit to an operation, but, before consenting she came to London for further advice. She paid separate visits to SIR JAMES PAGET, to the late MR. SKEY, and to me. I was the first whom she visited, and I gave an opinion that the tumor was a harmless one and might be let alone. Her second visit was to MR. SKEY, who said without hesitation it was a cancer and advised removal. Her third visit was to SIR JAMES PAGET, who said that the growth was innocent. It was let alone and the patient has had no further trouble from it for twenty years. Again, I was lately consulted about the case of a well-known nobleman, who had a soft growth in the front of his chest over the upper part of the sternum, which quickly attained a considerable size, and pronounced to be malignant by eminent authorities. It disappeared entirely under a course of small doses of the perchloride of mercury.

It is therefore not in cases which admit of any reasonable doubt of their nature that I would desire to urge a trial of the lime powder upon the profession. There are hundred of instances of unmistakable cancer in which an operation, if performed, may perhaps for a time diminish suffering or may prolong life, but in which it cannot afford any well grounded hope of restoration to health. For all such I would say that the lime ought to be persistently and fairly tried. It can do no possible harm, it need not interfere with any remedies for the present relief of pain, its action can be referred to a perfectly intelligible hypothesis, and it has been of unquestionable utility in a sufficient number of cases to warrant us in reposing some confidence in its use. We have a great hospital devoted to cancer, and cancer wards in others also; and I think the time has come when this simple means should be fairly tested by the profession. It is not long since we witnessed an extraordinary eagerness to try the Chian turpentine, which was so much extolled by DR. CLAY, and in support of which the *prima facie* case was nothing like so strong as that in favor of the remedy to which I desire once more to call attention.—*Lancet*, May 7, 1887.

THE ABUSES OF MILK DIET IN THERAPEUTICS.—The therapeutical employment of milk, not only has been popularized and the lay public made familiar with its various adaptations, but in the wake of the general apprehension has followed the usual exaggerations, and hence it is prescribed with little regard to the conditions properly requiring it. Under these circumstances it seems desirable to indicate the limitations of this therapeutical food, and to show wherein it may be hurtful rather than beneficial.

In certain disorders of the digestive functions, milk causes a sense of discomfort, decided uneasiness, oppression—sometimes even pain, and it prolongs the morbid condition. The cases of this kind may be grouped into two classes: those in whom the caseine is the offending material; those who cannot properly digest the cream or butter. We find examples of the first class more frequently amongst children, but they are by no means uncommon in adults. They are detected the more readily in early life, because the curds are rejected by vomiting, or appear undigested in the stools. Adults unable to digest casein, or who digest it slowly or painfully, have epigastric distress, heaviness and oppression for several hours after meals, stupor and disinclination for exertion coming on after an hour or two and continuing until the offending material has passed well down the intestines.

An excellent substitute for the milk when the casein disagrees is barley-water with cream. The barley-water should be carefully strained and have the density of good skimmed milk, and one-sixth or one fourth cream added, so that the mixture has the consistency of rich milk.

The second class of subjects to whom milk is unadapted are the cases of duodenal, hepatic and pancreatic diseases, because of the deficiency in the secretions necessary to the process of emulsionizing fats, and preparing them for entrance into the lymph vessels. Fats decomposing form very irritating fat acids, and the change in the reaction of the intestinal juices is the cause of serious secondary troubles in the biliary functions and elsewhere. To fit milk for use under such circumstances, it must be skimmed, and about the time the stomach digestion is completed, aids to the intestinal digestion should be administered. Such aids are a soda alkali, and it may be, some pancreative solution to effect complete digestion of the fatty constituents.

The mere bulk of the cream is an objection to its use in certain diseases. In dilatation of the stomach, the space occupied by the necessary quantity perpetuates the disease. The reflex effects of distension of the stomach in cases of weak heart, and in angina pectoris, may not only cause distressing symptoms, but may even prove fatal. It cannot be too strongly stated that milk is a highly objectionable aliment in heart diseases, whenever the motor apparatus of the organ is diseased, and whenever its movements are readily influenced by morbid states of the stomach through the reflex channels,

In no malady, as I conceive, is milk more abused than in acute rheumatism. It is very often the chief—sometimes the only aliment employed during the whole course of this disease. Besides the objection inherent in its mere bulk, certain theoretical considerations of its nature should have considerable weight in deciding the question of use. The very obvious objection that milk furnishes lactic acid as a product of its fermentation, should not be ignored. All the world knows the intimate relation between lactic acid and the rheumatic poison. By the introduction of lactic acid, a

form of endocarditis not distinguishable from the rheumatic, is set up, and of those diabetics treated by lactic acid, a considerable proportion suffered from attacks of rheumatic fever (acute rheumatism). It is difficult of course, to determine this point with certainty, but I have reason to believe that patients with rheumatic fever do not get well so quickly, and are much more apt to have relapses when they consume much milk during the course of the disease. Surely, sufficient reasons exist for undertaking a thorough investigation of the question. My own practice, in the cases in which I am consulted, is to advise against the use of milk as an aliment in acute rheumatism.

In typhoid fever, milk is the one food now given, irrespective of the character of the cases. Of late this almost universal practice has come to be challenged. It has been depended on, without investigating the state of the digestive functions, and quite unmindful of the effect it may have on heat production. It is often given in too great quantity at a time, or so frequently that the stomach has not disposed of one quota before another is thrust upon it. Unless the gastric juice has preserved to a considerable extent its power of converting the albuminoids into peptones—which we have no right to expect—the casein resists its action; hence it follows that the materials of digestion should be administered soon after the milk is taken, and to prescribe it without reference to the ability of the stomach to dispose of it is to insure increased fever and delirium, and more frequent stools. Besides supplying the means for proper digestion of the milk, attention should be given to its administration at such intervals that every portion given may be disposed of before another is permitted to enter the stomach. It is a trite observation, which is not therefore less true, that it is more important to the nutrition if some food be well digested rather than a large amount be merely swallowed.

Notwithstanding, since DONKIN'S first reports, milk has entered largely into the dietary of diabetics, its utility has recently come to be seriously questioned. If conversion of milk sugar into grape sugar does not take place, there can be no doubt of the value of milk in this disease, since it possesses so great a number of alimentary constituents. If, as now asserted, this conversion does take place, the free administration of milk in diabetes must be regarded as an abuse.—ROBERTS BARTHOLOW, M.D., LL.D., in the *Journal of Reconstructives*, July 13, 1887.

CANNABIS INDICA IN DIARRHŒA.—DR. S. J. RENNIE, of Cawpore, in the Indian Medical Gazette for December, 1885, calls attention to the value of cannabis indica in the treatment of dysentery. We wish to draw attention to its value in a similar condition, namely, diarrhœa; especially in the type known as summer diarrhœa, or English cholera. Attention was drawn to it in this connection by DR. TURNER, of the Holloway Dispensary, in the Lancet (vol. ii. 1866, p. 636). He says: "In ordinary diarrhœa," (referring to summer diarrhœa presumably) "the formula" (mentioned in a previous part of his letter as very valuable in cholera, namely

℞ Tincturæ cannabis indicæ, ♏x.
Spiritus chloroformi, ♏x.
Tincturæ Kino, ʒ j.
Aquam menthæ piperitæ, ad ʒ j.)

"in a modified dose, will be found very serviceable. Being connected with a dispensary where thirty or forty cases of diarrhœa presented themselves daily for treatment during the months of August and september, and where a great variety of remedies were tried, so great was the superiority of Indian hemp above the others, that the patients themselves got to know it, and invariably asked for the 'green medicine.'"

We have been in the habit of prescribing it in nearly all forms of diarrhœa with marked benefit, combined with medium doses of morphine. In summer diarrhœa the effects are very striking. There is no necessity to record cases, they are all very much alike; the great depression, the frequent watery stools, the vomiting, and the cramp-like pains are very quickly relieved, the appetite speedily returns, and by the following or third day the cases are practically well, except for some weakness and debility. The formula we generally use for an ordinary adult is:

℞ Tincturæ cannabis Indicæ, ♏x.
Liquoris morphinæ, ♏v vel ♏x.
Spiritus ammoniæ aromatici, ♏xx.
Spiritus chloroformi, ♏xx.
Aquam ad., ʒ j.

To be repeated every one, two, or three hours, according to circumstances. Directions: No food for several hours, but a little brandy and water. We have not seen one case run on to a fatal issue under this treatment.

It appears to act by increasing the astringent and anodyne properties of the morphine (the dose of morphine would have very little effect alone), by its stimulant effect on the nervous system, improving the tone, and by improving the appetite; thus enabling the system to quickly overcome the marked depression and exhaustion. Most remedies in this disease rather retard the return of the digestive functions, but from our experience Indian hemp markedly accelerates it. Indian hemp seems also to frequently counteract the bilious action of morphine, as well as the loss of appetite, and allows it to be given where it otherwise would not be tolerated.

In other forms of gastro-intestinal disturbance it is also valuable, probably for the same reasons. It was of marked use in the case of subacute gastro-enteritis, which had existed for a few weeks before it came under our care, in a girl aged 13 years, showing the following symptoms: marked anæmia, which had gradually come on after the other symptoms; constant pain over the abdomen, especially in the epigastric region, increased on pressure and after food; tongue covered with yellowish-white fur; loss of appetite; vomiting at variable times after food of partly digested material; diarrhœa, six or eight stools in the day, which were watery and green, containing partly digested food material; some rise in temperature—a little over 100° F. She was first treated with bismuth, then with effervescing mixtures, with no benefit; then with the cannabis mixture (modified to suit her age), and the symptoms

very quickly subsided, the vomiting and diarrhœa were checked, the pain ceased, and the appetite returned. By the end of the week all the symptoms had disappeared except the anæmia, which persisted for a short time longer.

In cases of tuberculosis diarrhœa we have not seen much benefit, beyond a slight relief of symptoms for a short time, though we have not had suffcient experience in this type; nor in the excessive diarrhœa in typhoid fever.

The use of cannabis indica in diarrhœa is certainly not new, as the quotations previously given will show; and an old dispensing chemist informed us that some twenty years ago he knew it to be frequently prescribed; but probably from the introduction of many new remedies, and from good specimens of the drug having been not always obtainable, il has with many other valuable remedies been temporarily forgotten. We can find no mention of it in modern works on medicine.—FREDERICK F. BOND, M.D., and B. E. EDWARDS, M.B., *Rastrick; London Practitioner*, July, 1887.

THE USE OF INDIGO AS AN EMMENAGOGUE. DR. S. T. YOUNT, of La Fayette, Ind., in a paper read before the Tippecanoe County Medical Society, recommends very highly the employment of indigo as an emmenagogue. He writes: "It is perfectly safe, thoroughly reliable, and painless in its action. It is insoluble in water or alcohol, but readily dissolves in strong sulphuric acid. This so changes its character that it is then readily soluble in water without changing its color.

"It is odorless and tasteless, and may be given in doses of ʒ j. to ℥ ss. The greatest difficulty is the nausea and vomiting which the crude drug produces when given in very large doses. There are three varieties of the crude drug: Bengal, Turkey, and Chinese.

"The Bengal is richest in coloring matter, containing about fifty per cent., and inasmuch as the virtue resides in the coloring matter, the best effects are obtained from this variety. As an emmenagogue it has been used in my practice about a year and a half. My attention was first directed to it on one occasion when I was called to remove a retained placenta in a case of abortion at the third month. Naturally inquiring what had been taken to produce the abortion, I was told that the lady had taken indigo in teaspoonful doses three times a day, that she had taken it several times, and always with a most satisfactory result to her.

"She informed me at the time that it always produced great nausea and watery discharges from the bowels. Acting on the suggestion offered by this case, I tried it in many and various cases. In one case, where a young lady, aged eighteen, had missed for thirteen months, the menses returned after taking the crude indigo for two weeks; but the disgust and nausea produced by the bulky powder rendered her unable to continue it longer, and she menstruated three more months: then they stopped again. After using the remedy for eight or nine months in this crude state, I set about to find some way of condensing it, or rendering it less bulky, for it is the bulk of the dose, not the remedy, that disturbs the stomach and disgusts the patient. About a month later MR. O. G. ZERSE, an apothecary of La Fayette, turned over to me a concentrated extract, as he called it, five grains of the extract equalling twenty-six grains of the crude drug. I have since then used it in forty-eight cases of amenorrhœa, of all kinds and causes, with but three failures, and a colleague has used it in six cases without any failure. To test its effect I have given the remedy in the amenorrhœa of phthisis, and have always had a definite result, namely, the appearance of the menses, the menses stopping again when the remedy was stopped. The effects with the crude drug and the concentrated preparation are identical, except that the nausea does not occur when the extract is used. The menses come on painlessly and very suddenly. There is no warning given. In thirty cases the effects occurred about two days after the last dose, the menses coming on without any warning, gushing out and running often to flow. The hemorrhage in none of the cases was dangerous or alarming. During the administration of the drug the os uteri becomes soft and patulous, admitting the end of the index finger. There is often a serous discharge from the vagina. The urine becomes of a brownish-green color and offensive odor. The stools are of a bluish color. The passages are watery and offensive.

"To summarize, indigo is an emmenagogue of decided value in any case. It should not be given to pregnant women. It should not be given where there is an irritable stomach. It should not be given in cases where there is a history of a previous pelvic inflammation. It should not be given in cases where there is marked cerebral anæmia. It may be given in doses of ʒ j. to ℥ ss., two or three times a day, of the crude drug, or in five-grain doses of the concentrated extract. The powder of the crude drug should be given mixed with a little subnitrate of bismuth, and the patient should drink a little whiskey afterward. In cases where given continuously for a long period, give tr. gentian comp. after each dose. Give the concentrated extract in capsules mixed with extract of gentian and subnitrate of bismuth."—*Med. Record*, July 9, 1887.

SPARTEINE AND NITRO-GLYCERINE IN MORPHINE HABIT.—In a note on the "Modifications of the Pulse in Morphiomania," presented to the French Académie des Sciences in March, 1887, by PROFESSOR B. BALL and DR. OSCAR JENNINGS, the authors discussed the mechanism of the morphia craving, and showed that there is ischæmia of the general circulation during the period of privation, and that an injection of morphia administered at this time causes a disappearance of the psychosomatic suffering which constitutes the craving, and is followed by restoration of the pulse. In a communication to the Académie de Médecine in March they stated that they had found that morphia craving can be appeased by other drugs which restore the pulse in a similar manner. "We thought," they say, "it would be preferable to try heart tonics, and strengthen the action of this organ in moments of weakness. To this end we have employed sulphate of sparteine, which fulfills most of the conditions, and can easily be administered by hypodermic injec-

tions. We watch for the moment of weakness as indicated both by plateau in the sphygmographic tracings and by the intimate sensations of the patient. At this moment we administer an injection of from two to four centigrammes, which may be repeated when necessary, and at the expiration of a few minutes we see the pulse strengthen and the craving disappear . . . , Another medicine which procures a passing relief of the symptoms is nitroglycerine. Its effects, very similar to those of sparteine as regards the point in question, are at the same time much more rapid and much more ephemeral."

Since these reports were made DR. JENNINGS reports, in the Lancet, of June 25, that he has administered sparteine and nitroglycerine repeatedly in fourteen different cases, and he is convinced that in these agents, properly administered, we possess a means which will enable any morphine habitué earnestly desirous of leaving off his intemperance to give up the habit. That treatment of this kind is better than restraint can scarcely be argued. Sparteine and nitroglycerine should be used only when really needed, and should not be at the patient's disposal. DR. JENNINGS' experience is that the effect of nitroglycerine is most satisfactory and persistent in those cases in which there is a predominance of the "yearning" over the "craving"—in which the psychical symptoms are more distressing than the bodily. But when there is more physical craving than mental suffering (morphine-nostalgia) sparteine, which is a tonic to the circulation, gets better results than nitro-glycerine alone. And in the simultaneous administration of the two drugs, the one by hypodermatic injection, the other placed upon the tongue, DR. JENNINGS thinks we have a perfect remedy for the morphine craving in its double psycho-somatic modality, He thinks it will be found that those patients who say they receive no benefit from this treatment do not desire to be cured.—*Jour. of American Med. Association.*—July 12, 1887.

MARTINEAU'S NEW REMEDY FOR DIABETES. —MARTINEAU'S new anti-diabetic remedy, which is now being called for by physicians and druggists, is an artificial lithiated arsenical water. MARTINEAU claims extraordinary results from this water, recording 67 cures out of 70 cases, *i. e.*, 96 per cent. The mode of preparing and of prescribing this remedy is as follows: A syphon bottle holding about a litre (one quart) is taken; into this is put a powder consisting of 20 centigrammes, or about three grains of carbonate of lithia. A tablespoonful is then added of the following solution:

Take of distilled water 500 grammes (1 pint 5 drachms).

Arseniate of soda 20 centigrammes (about 3 grains).

M. Dissolve.

The syphon bottle is then charged with carbonic acid water from a soda fountain, and is ready for use. The patient makes this water his principal beverage, taking the whole quantity in about equally divided doses with his meals. The bottle must be freshly charged every morning. MARTINEAU allows the patient to take with the water a little wine. The diet is not modified, except that a certain amount of reserve is enjoined in the use of starchy foods, fruits and sugar.

MARTINEAU claims to have learned this mode of treatment from PROF. ROUGET twelve years ago. When the diabetes is treated by lithia alone, or by arsenic alone, the result is not the same. Many of the natural mineral waters, as Vichy, Royat, Bourbole, Pourges, St. Nectaire and even Canterets, have a favorable action on diabetes; this is due, MARTINEAU thinks, to the fact that they all contain lithia, and some of them, notably Vichy and Bourbole, contain arsenic.

Any physician in country practice, where easy access can be made to a soda water generator, can prepare for his diabetic patient MARTINEAU'S remedy. He has only to fill an ordinary quart bottle in which he shall have previously put a three-grain carbonate of lithia powder and a tablespoonful of the above-mentioned solution, with gaseous water from the soda fountain, and order the whole quantity to be taken during the day after meals.

As for the curative value of this prescription, there is justification for considerable scepticism, DUJARDIN-BEAUMETZ, at the meeting of the Societé de Therapeutique where MARTINEAU'S paper was read, expressed grave doubt as to whether the 67 cases cited by MARTINEAU were typical cases of diabetes, and was tempted to believe that MARTINEAU had fallen upon a series of cases of *alimentary diabetes*, like those treated by CANTANI, at Naples, where abuse of pastry, sweets and starches had given rise to a temporary glycosuria that was not true diabetes.—*Med. and Surg. Reporter*, July 9th, 1887.

TREATMENT OF ACUTE DYSENTERY.—The inflamed œdematous condition of the mucous membrane, and subsequent obstruction to passages from the bowel, is well known. Remembering the relief often obtained from the application of hot water to inflamed surfaces, and the beneficial effects of solutions of bichloride of mercury upon ulcerated surfaces, particularly of mucous membranes, the thought occurred to me that if I could carry the hot water into the bowel, allowing it to flow back in sufficient quantity to remove for a distance from above all fecal and offending matter, I should accomplish two important objects—*i. e.*, relief of pain, and prevent absorption of poisonous matter up into the blood, the antiseptic properties of the bichloride aiding in this latter object. Upon this I acted, using a soft rubber tube attached to a DAVIDSON'S syringe, passed carefully through this sensitive inflamed tissue, so as to carry the liquid above the rectum into the colon. The patient was placed on his side, with an oil-cloth beneath him, and four or five quarts of water as hot as could be borne were injected and allowed to flow back with whatever substance had accumulated or remained in the bowel above. When the water returned clear, then a quart or more of the solution of bichloride, about 1 to 10,000, was injected and allowed to return in the same manner. The effect was immediate relief of pain and tenesmus. A suppository of opium, one grain, was given and retained; and, for the first time after the attack, the patient slept seven hours, awakened refreshed, could take some food, and, if perfectly still, was free from pain. In

about twelve hours slight return of pain was felt, and the same treatment repeated. This treatment was continued, with the bichloride solution, four times, and the hot water alone was used for four or five days more. with suppositories of one grain of opium, morning and night, with perfect recovery, no medicine being administered by the stomach, except one-grain doses of quinine. three times per day.—DR. FORDYCE, *Buff. Med. and Surg. Journal.*

USEFUL PREPARATIONS OF IODOL.—DR. WOLFENDEN, of London, mentions in the Practitioner for May, 1887, the following as preparations which he has found useful:

1. Powder of Iodol.—The pure powder may be used. There is no need to mix it with starch or sugar, etc., since, being fine, it is readily dusted over a raw surface, or insufflated into the throat. Possessing no toxic power, it is of more importance to cover the diseased surface than to measure the dose. For all laryngeal, pharyngeal, and most nasal and oral conditions this is, perhaps, the most generally useful application.

2. A solution in Alcohol and Glycerin.—This was MAZZONI'S original application:

Iodol, 1 part;
Alcohol, 16 parts;
Glycerine, 34 parts.

This forms a good application by means of the brush, or may be used as a very coarse spray.

3. Iodol, 1 drachm; ether, 1 ounce.—This forms a clear brown solution, useful for application either by the spray or brush. The ether quickly evaporating leaves the powder *in situ*. It is useful for naso-pharyngeal atrophic conditions.

4. Iodol, 1 drachm; glycerin, 1 drachm; vaseline, 7 drachms.—This is a modification of one of RUMBOLD'S sprays. It is a very soothing application for pharyngeal conditions. It requires to be warmed before using.

5. Iodol pastilles.—(Iodol, 1 grain; glycerin, 1 minim; glyco-gelatine, 18 grains.) These are very useful for chronic pharyngeal conditions, and are much preferable to iodoform pastilles.

6. Iodol bougies, containing half a grain of iodol in each. These are made for use in diseased nasal conditions.

7. Iodol wool, 10 per-cent., for tampons, etc.

8. Iodol gauze for dressings.—*Med. News.*

SALICIN IN THE TREATMENT OF SCARLATINA.—Referring to the letters which have appeared in the Journal respecting the treatment of acute tonsillitis by salicylate of sodium, I can endorse the opinions expressed therein as to its efficacy, as also the fact that it is no new remedy. My experience, however, has convinced me that the pure alkaloid (salicin itself) is by far the best form to administer the willow in this affection. If given early, after a free purge, the disease will certainly be arrested, but if the tonsils have become much swollen and hard, or if pus has formed, nothing will prove effectual, and the disease will run its course.

In scarlatina, especially in that form known as scarlatina anginosa, salicin is of great value. In those cases of simple scarlatina in which the disease is prolonged by the throat complication, salicin immediately effects a cure. I have treated during the last three years twenty-seven or twenty-eight of such cases, and in no instance has failure occurred. I do not consider it necessary or prudent to administer it in every case of scarlatina as a routine treatment. Salicylate of sodium should not be given, as poisonous symptoms set in when it is administered in large doses to young children. I generally give it to a child five or six years of age five grains of salicin every two hours until the temperature becomes normal; afterwards the same quantity three times daily for a few days to prevent a relapse.

Belfast. W. P. MEHARRY, L. R. C. P., L. R. C. S. ED., etc.—*Brit. Med. Jour.* July 2nd 1887.

PHOSPHORUS AND ITS ADMINISTRATION.—SOLTMANN condemns all aqueous preparations of phosphorus, and recommends the oily preparations, and especially an oily solution of 1 to 500. In its preparation three grains of phosphorus are dissolved in three and one-eighth ounces of oil of almonds over a water bath; when the phosphorus has been previously thoroughly dried and the process is carefully conducted, the phosphorus is never deposited. The physician may order as follows:

℞ Phosphori, gr. $\frac{1}{6}$
Ol. morrh, ʒ $3\frac{1}{8}$.—M.

Sig.—Daily one teaspoonful, which may be conveniently dispensed by adding five grammes (ʒ $1\frac{1}{4}$) of the almond oil solution of phosphorus to ninety-five grammes (about three ounces) of cod-liver oil.

The following formula may also be employed:

℞ Phosphori, gr. $\frac{1}{6}$
Ol. amygdal. amar, ʒ $2\frac{1}{2}$
Aquæ destill. ʒ 20
Gummi arab. ʒ $2\frac{1}{2}$.—M.
Ft. emuls.

Sig.—One teaspoonful daily.—*Therapeutische Monatshefte.*

THE RELIEF OF THE DYSURIA AND STRANGURY OF OLD AGE.—FISCHER has found the following pill useful:

℞ Ext. nucis vom., gr. 8.
Liquiritiæ, q. s.,
Ft. pil. 50 in num.
Sig. Two pills on retiring.

—*Deutsche medicinische Wochenschrift*, June 16, 1887.

SELTZER WATER AS AN ANODYNE IN CASES OF SUPERFICIAL BURNS is recommended by M. DUBOIS, of Villers-Bretonneaux (Répert. de pharm."; "Lyon méd.") It is sufficient to allow the contents of a siphon previously cooled, to flow over the part. The effect is attributed partly to the refrigeration and partly to the carbonic acid. While the application is not supposed to have any decided curative action, it is thought to hasten the burned part to its normal condition.—*N. Y. Med. Jnl.* July 9th.

The Medical Age.

Vol. V. DETROIT, AUG. 25, 1887. No. 16.

Original Articles.

ABDOMINAL SURGERY AND HOW TO LEARN IT.

BY HAL C. WYMAN, M. D., DETROIT, MICH.

(*Continued from page* 342.)

A dog whose stomach I had filled with fragments of broken brick, for the purpose of testing the feasibility of removing foreign bodies from the stomach or intestines, like the famous "fork case" which occurred in France some years ago (*vide Le Progres Medicale*, 1875) was the subject of investigation. The pieces of brick were forced into the stomach *per vias naturales*.

The abdomen was opened in the median line, and an incision about two inches in length made in the anterior wall of the stomach, parallel with its long diameter. Large numbers of the terminal branches of the gastric arteries were divided and bled copiously, so that each one required twisting to check the hemorrhage.

Through this wound the fragments of brick were removed, and the wound closed by sutures of the kind last described.

No difficulty of a particular character followed, the animal making an uninterrupted recovery.

INTUSSUSCEPTION.

For the purpose of ascertaining what might be done to unite the bowels, in case of intussusception, valvulus, or any condition which destroys a large portion of the intestine; I made a section of the abdomen of a medium-sized dog. Taking the intestine between the thumb and finger of my left hand, with the scalpel handle I pushed that portion of the intestine above my fingers downward between my fingers in such a way as to invaginate it in the part below.

I was surprised at the difficulty of carrying out the procedure. After repeated trials, I found it impossible to produce an obstruction of the bowel by the telescoping process, which would not straighten itself out, immediately the telescoping pressure was removed. However, I found that I could invaginate four or five inches of the bowel, and the reason why a greater extent of bowel could not be invaginated was that the mesentery rolled up in an accumulated mass, too large to enter the intestine at the point of invagination.

ENTERECTOMY.

I excised with the scissors, by direct incisions, five inches of bowel, and noted the following conditions: First, a serious hemorrhage from the mesentery, which required eight ligatures to control the bleeding arteries. Second, I found on approximating the cut ends of the bowel, that the mesentery as I had stripped it from the bowel, accumulated in such a way as to prevent the easy approximation of the cut surfaces by suture.

EXCISION OF THE MESENTERY.

So large an extent of mesentery rolled up between the cut ends of the bowel after I had joined them with interrupted sutures, beginning with the mesentery on one side, and running around the surface of the bowel, at a distance of one-fourth of an inch, that I was obliged to excise a V-shaped portion of mesentery, carrying the incision down from the margin of that organ to its point of attachment to the spine.

In making this section of mesentery, but three arteries required ligature, while by the other method, it will be observed, I had to tie eight.

The cut surfaces of the mesentery were approximated and fastened by two sutures. This operation was followed by recovery, and a subsequent post-mortem examination showed a considerable contraction of lumen of the bowel at the point where the cut surfaces were united. The mesentery contained two knots, which on section were found to contain the sutures with which the V-shaped section of mesentery had been closed.

When a complete section of bowels is removed, measuring more than two and one-half inches in length, it is best to carry the incisions down in a V-shaped direction to the root of the mesentery, and then fasten the cut surfaces of the mesentery as before described. The removal of the intervening excess of mesentery greatly facilitates a perfect coaptation of the cut ends of the bowel.

We cannot feel safe in regard to any such union of the bowel until we know that the two peritoneal surfaces are in contact in every part of the circumference of the bowel. The smallest opening or protrusion of the mu-

cous membrane makes an intestinal opening through which the intestinal contents, liquid, solid or gaseous may escape, to set up a fatal peritonitis.

A great deal of practice is necessary to enable one to join the cut ends of the bowel by sutures in such a way as to give them the best possible chance of healing together.

COLOTOMY.

This operation is made necessary by obstruction in some part of the large intestines, which prevents the normal evacuation of the bowel. Cancer is most frequently the cause of that obstruction.

In cases of cancer affecting the rectum, or the sigmoid flexure, the colon is most easily reached by an incision made about midway between the crest of the ilium, and the termination of the last rib, parallel to the anterior border of the quadratus lumborum muscle.

An incision carried through the abdominal wall at this point, strikes the colon, and when that intestine has been incised and its contents evacuated, the margins of the intestinal wound should be carefully sutured to the margins of the abdominal wound. This procedure constitutes a colotomy.

There are two methods of doing this work in man; one is to make two operations of the procedure.

First. Make the incision through the abdominal wall, exposing the intestine, then carefully suture the peritoneal coat of the intestine to the peritoneal margin of the abdominal wound, so as to get a blending of the two peritoneal surfaces, to prevent the entrance of foreign matter into the abdominal cavity.

Second. When these two surfaces have blended, divide the intestinal walls, and penetrate the cavity of the gut, making an artificial anus.

To carry out this work properly, by either of these methods, much depends upon the handling of the sutures, and no one should undertake the operation who has not first tried it repeatedly upon dogs and rabbits,

To make colotomy upon the dog, the same relative anatomical locality is selected.

First find the crest of the ilium, then seek out the anterior part of the quadratus lumborum muscle, and cut through the abdominal wall until the peritoneal cavity is reached.

The colon will be found in the bottom of the wound, and can be easily drawn into it.

Now thread the needle and carefully suture the peritoneum to the side of the wound, putting the sutures at a distance of about one fourth of an inch apart, and carrying them through skin, muscle, peritoneum and peritoneal coat of the intestine.

Cut all the sutures short, dress the wound according to the custom of the day, and wait four days until the blending of the peritoneal surfaces has become complete. Then make an incision through that part of the colon which protrudes through the wound, and the cavity of the gut is reached and the colotomy is complete.

This description will suffice for dogs, rabbits or cats.

Some surgeons speak, from a theoretical standpoint, of selecting for a colotomy that particular part of the colon which is found adherent to the peritoneum of the abdominal wall, and making the incision into the colon through that point, thus avoiding any wound of the peritoneum.

On lower animals at least this measure is quite impossible, and in man, with the modern methods of operating, the danger of peritoneal wounds resulting fatally, is so small, that operators need not attempt these theoretical or impracticable measures.

I question whether it is possible to make a colotomy in any part of the colon, under its natural conditions, without opening the peritoneal cavity. I certainly should not attempt it, and should feel perfectly safe to leave my patient to the chances of recovery, in accordance with the methods I have described.

EXCISION OF THE PYLORUS AND STOMACH.

Within recent years aggressive surgeons have decided that the pyloric portion of the stomach may be excised when invaded by stricture or malignant disease.

It is not the purpose of this article to discuss the merits of such procedures, nor the causes which would make them warrantable.

But the tyro in surgery should familiarize himself with the steps necessary in the performance of this operation.

For this reason, I have taken a large dog, made an incision beginning about an inch below the ensiform cartilage and carried it downwards to the umbilicus.

Through this opening the stomach is easily reached, and if it is not too full of the last meal, it may be withdrawn through the wound. Now to excise the pylorus, draw it through the wound and carefully isolate that portion of the prima via. Then with the scissors resect an inch in the long diameter, including the pylorus, and a portion of the ascending part of the duodenum.

The hemorrhage is profuse, and many arteries will require ligature. Now proceed to draw the gastric wound from the abdominal cavity, and measure its length, when the two mucous surfaces are in apposition. Also measure the length of the wound in the duodenum.

If the wound of the stomach has proceeded any considerable distance from the pylorus toward the cardiac end, the stomach wound will be found a great deal longer than the wound in

the duodenum, and in bringing the parts together, it will be necessary to close up the gastric wound, until it is no longer than the wound in the duodenum. To do this pass the sutures by simply carrying the needle through the peritoneal coat of the stomach, introducing it about a quarter of an inch back from the margin of the wound, and bringing it out from the peritoneum near the margin of the wound.

Then reaching across the cut end of the stomach, pass the sutures in the same way upon the opposite side, introducing this suture a little less than a quarter of an inch from the margin of the wound. Increase the number of the sutures until the wound in the stomach equals in length the wound in the duodenum.

Now begin a separate system of sutures and in this follow the same plan of introducing the suture so far as the wound in the stomach is concerned, but instead of reaching across to the opposite side of the stomach wound, introduce the suture in a similar way in the wound of the duodenum.

Introduce these sutures at intervals of at least one quarter of an inch, until the circumference of the duodenum is included.

Now when the tying process begins, if the sutures have been introduced as I have here advised, the cut surfaces will protrude into the cavity of the stomach, and the peritoneal surfaces will be in perfect apposition. There will be no puckering or pouting in any part of the wound whatever.

EXCISION OF PYLORUS.

Imagine with another dog, that you have a localized carcinoma of the cardiac end of the stomach.

Make an incision in the median line, beginning near the end of the ensiform cartilage, and carry it down to the umbilicus. Introduce two fingers of the right hand into this wound, and pass them downwards into the left hypochondriac region. Catch the cardiac end of the stomach and draw it through the wound. The spleen will be found quite easily in this procedure, and the freedom with which it moves about in the left side of the peritoneal cavity noted.

After the cardiac end of the stomach has been drawn nearly through the wound, proceed with the scissors to excise all that your fancy may mark as the seat of disease.

In doing this grasp the edges of the wound in the stomach, with forceps and fingers, in such a way as to hold them upwards, so that gastric juice, or food which may be contained in the stomach may not escape into the cavity of the abdomen, to cause a fatal peritonitis.

Suppose your resection extends so as to include the pylorus with the whole of the pyloric end of the stomach. The only limit to such an extensive excision will be your ability to ligate with sufficient rapidity the many spouting blood vessels and to bring the cut ends of stomach and intestines together.

Now all hemorrhage being controlled by means of ligature, torsion or the actual cautery, begin with the suture of Lembert and carefully close the wound.

The stomach after the sutures have been tied, will be found to have lost nealy one-half its volume, yet there will be sufficient tissue to establish a perfect continuity between the œsophagus and the duodenum, and the animal's chances for recovery be very good.

The hemorrhage which occurs from the operation is so great that the utmost pains must be taken to remove every particle from the peritoneal cavity, else clots from the wounded omentum will set up a fatal peritonitis.

Before ever attempting this operation upon man, practice it at least five times upon dogs. The similarity existing between the stomach of dog and man, so far as the mere anatomy is concerned, is so great that when one has accustomed himself to the manipulation necessary for carrying out excisions of a considerable portion of the stomach or pylorus, upon dogs, and had them recover from this operation, he need have no fear in performing the same operation upon man.

So far as the technique of gastrotomy is concerned, it is limited almost to manipulation for the control of bleeding arteries, and the introduction of sutures in closing the wounds.

Very little skill will be required in doing the cutting. But in making the different parts fit accurately, the one into the other, after the part supposed to be diseased has been removed, good judgment, a trained and practiced eye, and no little deftness of touch and manipulation are necessary.

DIGITAL DILATATION OF THE PYLORUS.

Digital dilatation of the pylorus may be practiced upon dogs. All that is necessary to acquire the manual part of this operation is to reach the pylorus through a wound in the abdomen and stomach of a dog, then gently pushing the finger through the pyloric constriction, estimate the resistance of the tissues so that dilatation without rupture through the pylorus may be obtained.

SPLEENOTOMY AND SPLEENECTOMY

The surgical operations just described, in the consideration of excision of the stomach and intestine, present the feasibility and practicability of cutting into or cutting out the spleen.

This organ has in several cases, been removed from man with benefit to the general health.

In studying the operation of spleenotomy, or -ectomy, we must have in mind the relations

of the spleen to the vascular system of the abdominal cavity.

It receives a large splenic artery, and from its hilum emerges numerous large veins which gather into large trunks and become part of the system. In man these same relative anatomical relations exist.

To reach the spleen, the incision may be made in the median line below the spleen, or parallel with the border of the ribs.

In most cases for which an operation upon the spleen may be performed, the work can be done through an incision in the median line of the abdomen.

If the intention is simply to cut into the spleen, and remove a tumor or a foreign body, we only, when practicing upon dogs, make an incision in the abdominal wall, precisely as though we intended to resect a portion of the cardiac end of the stomach.

Through this wound the spleen may be drawn, without fear of serious damage to any of its important vessels.

An incision may be made freely into it. The result may be a copious hemorrhage, which, however, yields most readily to the liberal application of hot water.

The greater the hemorrhage, the hotter the water should be, because no other means known to me will so completely arrest a serious hemorrhage from the spleen tissue.

I have tried transfixing the margins of these wounds with sutures, and tying them, in the hope of checking the hemorrhage from a simple incision in the spleen substance, but so great is the friability of the spleen that sutures or ligatures pass through its substance, leaving fresh wounds.

The steady, persistent use of hot water applied by douche, direct to the wounded surfaces, in the majority of instances works admirably.

I have tried also to control this hemorrhage by curetting the wounds with a blunt instrument, but without avail.

I have tried rasping the wounded surfaces with a harsh tooth-brush, thinking in that way to tease out the wounded ends of the small vessels.

The spleen is an organ largely supplied with peculiar contractile tissue, and upon this water of a high temperature acts in such a way as to close the mouths of the bleeding vessels.

The details of these experiments will be found very interesting and instructive when carried out on dogs.

For complete removal of the spleen, we need only draw the organ a little more through the abdominal wound, and then by means of a round needle with a strong ligature, transfix the splenic omentum as it emerges from the hilum. Cut off the needle, and tie the ligatures upon either sides of the parts penetrated by the needle, including all of the vascular structure entering the spleen.

In the dog this is one of the simplest surgical procedures that can be made in the abdominal cavity, and is almost always followed by the recovery of the animal.

But when the spleen is diseased, when it has been very greatly enlarged by cystic degeneration, or by general hypertrophy, the various vessels which enter and leave the organ may be so enormously enlarged, that to prevent a fatal hemorrhage through the operation of removal it will be necessary to pass the ligatures with greater care, exercising the utmost caution that the needle with its thread does not wound or weaken any vessel along which it may pass, and that in tying the ligatures no tension may be brought upon the long diameter of any of the included vessels in such a way as to tear or break their continuity.

The inclusion of a large number of vessels in one ligature will be dangerous, from the fact that they ramify to the remotest portions of the hilum, and a great deal of tension would thus be brought upon the long diameter of some of the vessels, and their walls being friable, would easily break down, permitting a hemorrhage into the abdominal cavity, perhaps after the adomen had been closed.

(To be Continued.)

A CASE OF DEATH FROM RUPTURE OF THE MIDDLE MENINGEAL ARTERY.

BY THEO. A. M'GRAW, M. D., DETROIT, MICH.

The case which I will now record presents some peculiar features which are of interest in connection with cerebral localization.

On Aug. 10, 1887, Harry McVar, aged fifteen years, was thrown violently from a wagon upon a stone pavement, alighting on his left shoulder and ear.

Drs. Ellis and Robbins, who were first called, found him partially insensible, with the pupils somewhat unequally dilated. He neither vomited nor had any involuntary evacuations. His pulse was 80 to the minute and a little full. His respirations, 18. His hands were cold and clammy. He lost no blood whatever from the nose, mouth and ears, and the scalp was not cut. The left ear was severely bruised and the scalp above was swollen by extravasated blood. I saw him twenty minutes later, when he had regained consciousness. He then answered questions intelligently, and complained of pain in the head and back. He moved both arms and legs freely, and as no fracture could be discovered, it was hoped that he had escaped serious injury. He was carried home, cold water applied to his head, and bromides given internally. His room was darkened, and absolute quiet enjoined.

In the afternoon, at 4 o'clock, he was found

to be comfortable and perfectly rational. He complained chiefly of pain in his back, but there was no paralysis whatever in any part of the body. The pupils of both eyes were somewhat dilated, but were equal, and responded readily to the light.

On Thursday, he was even better. His back was still sore, and he complained of slight headache. His mother informed me that he had always been subject to headaches, and as his temperature was normal I felt no alarm.

On Friday morning his temperature, respiration and pulse were all normal, and the pupils were of moderate size, and responded equally and readily to the light. He could move himself easily in bed without pain, and was hungry, but there was still a slight headache.

As his bowels had not moved, I ordered a dose of Rochelle salts, and enjoined continued quiet. At one o'clock P. M., on Friday, he went, contrary to orders, to the bath-room and had an evacuation of the bowels. At three P. M. he screamed suddenly with pain over the left ear and began to toss himself to and fro in great agony.

I was sent for, but did not arrive until four P. M., when I was shocked to find him in a state of collapse. His pulse was 120 per minute and feeble, and he was tossing to and fro in bed. His pupils were narrowly contracted and his skin was cold and drenched in a clammy sweat. I spoke to him, asking him about the seat of his pain, but could get no answer from him but "don't bother me." These were the last words that he spoke. On the spur of the moment I injected 1-60th of a grain of atropine under the skin of his arm. Whether the subsequent wide dilatation of the pupils was due to this or other causes, I can not say.

His family physician came in about half-past four, and stayed with him while I went for instruments and assistants. My diagnosis was hemorrhage at the seat of contusion, and I purposed trephining and, if possible, relieving the pressure. I arrived with DR. ROBBINS and the necessary appliances at half past five o'clock, but found him in articulo mortis. The centres of respiration had evidently become affected, and he drew his breath slowly, stertorously, and at long intervals. The respiration, however, never assumed the characteristics of the CHEYNE-STOKES variety, but simply grew more superficial, while the intervals between the inspirations grew longer. When I entered the room his face had become livid, and his mouth foamed. All motion of the extremities had ceased. His pulse was very feeble, and could not be counted.

I should then have trephined the skull in the hope of relieving the pressure and restoring him to life, had not the rapidity of the morbid action caused me to change my first diagnosis of rupture of the middle meningeal artery. On thinking the matter over and reflecting on the sudden involvement of the centres of respiration and the total absence of all paralytic symptoms until consciousness had been lost, I came to the conclusion that the lesion must be one of the deep arteries of the brain and that the operation therefore would be useless.

He died at seven P. M., four hours after his first seizure.

A post mortem examination was made at the residence at seven o'clock of the next morning.

There was extravasated blood over all the left side and top of the head immediately under the scalp. The skull was nowhere broken, the most careful scrutiny being unable to discover even an abnormal mark on the bone.

Between the dura mater and the skull, in the temporal fossa, was a fresh clot of blood which could not have weighed over an ounce and a half. It lay on the side of the head hardly reaching the floor of the fossa and extending above no higher than the temporal ridge. Posteriorly it was limited to the boundary of the squamous portion of the temporal bone but anteriorly, it did not quite reach that boundary. The portion of brain subject to pressure, therefore, was that part of the middle lobe which is marked on E. C. SEGUIN'S figure in PEPPER'S "System of Practice" as the acoustic centre for speech and more doubtfully as the centres of smell and taste. The brain was most carefully examined but in vain for other lesions. There was no extravasation of blood anywhere else either within or without the skull, nor was there any dropsical effusion in the ventricles, nor any morbid appearance to denote cerebral injury. Here then is a case in which an extravasation took place, from the middle meningeal artery, fifty-two hours after the reception of the injury, and in which, although the amount of extravasated blood was small and the surface subjected to pressure was one not ordinarily credited with the control of the respiratory movement, death occurred in a remarkably short time after the occurrence of the hemorrhage. Although the upper and thin part of the clot extended far enough up to press upon the lower lateral surface of the anterior lobe, there was no paralysis of the right arm. This may be explained by the thinness of the clot at that part and the consequent slight pressure.

This case is, in my experience, unique in the rapidity of its course, for I have post-mortemed many men with fractures at the base of the skull in whom extravasations of blood of much greater extent have taken place in the same area, and who have nevertheless lived several days. It is instructive in the lesson which it gives as to the propriety of

trephining in all cases in which death is imminent after injury, with symptoms of compression of the brain. In this case, I should have followed out that rule, had not the extreme rapidity of the morbid process rendered it impossible and it is even now a question in my mind whether it should not have been done even in articulo mortis, with the probability that the patient would die under the knife.

CASES OF SYNOVITIS OF THE KNEE JOINT.*

BY E. B. WESTON, M. D., CHICAGO, ILL.

Synovitis, though a surgical disease, is one which the general practitioner often treats—is often compelled to if he have a country practice—and there is no reason why he should not treat it well and successfully.

A slight synovitis may recover rapidly without treatment, and so these cases get well when treated with a poultice, or painted with tincture of iodine. But the physician who makes this his routine practice will not have many "flattering successes," and the number of cripples in his neighborhood will be monuments to his want of thoughtful attention.

I have four cases of synovitis of the knee to report. Not that they present points of peculiar interest, but to emphasize their importance, even though I disclose my own mistakes in doing so.

Case 1.—A. B., Irish, aged about 50, laborer. I met him on the street Jan. 1, 1885, when he told me he had a pain in his left knee; that he did not know of injuring it in any way. Having a physician's dislike for using "all out doors" for his office, and being consulted wherever he chances to meet a would-be patient, I gave him little attention, and advice of a very general nature. One week later he sent for me. I found him in bed suffering severe pain, knee distended with fluid in joint cavity, leg flexed. He refused to have fluid evacuated, or even to have leg put on splint, although I plainly told him of the probable consequences of not doing so. Then, instead of leaving the case, I allowed him to be his own physician, while I continued to make daily visits and suggestions.

I have no full notes of the case, but it went from bad to worse. Abscesses formed in the thigh, which were opened as they developed, drainage tubes passed in various directions, the limb becoming honey-combed by the burrowing pus. These cavities were frequently syringed with carbolized water and the limb kept on a pillow of oakum. He was given a nourishing diet, stimulants and tonics. But he gradually lost flesh and strength, temperature increased, and on the first of March he died of sepsis and exhaustion.

*Read before a meeting of the Chicago Medical Society, July 5, 1887.

Case 2.—C. D., American, aged about 45, by profession a lawyer. First saw him March 4, 1886, when he told me his left knee had pained him quite constantly, but not very severely, for about ten days. He thought he had taken cold in it while sitting at his desk, under which he had felt a draught. I found the knee moderately enlarged, joint distended with fluid and hot and painful. I ordered him to bed and had applied an anodyne liniment and warm fomentations.

This treatment was continued for three days without benefit, when I opened the synovial cavity with a bistoury and evacuated about eight ounces of light straw-colored, probably nearly normal, synovial fluid. He was at once relieved of pain, the limb put on a well-padded posterior splint, and an elastic bandage applied. The fluid gradually accumulated, and in four days the joint was again full, hot and painful. I now aspirated it and reapplied the bandage. There was again a slight filling, but not sufficient to necessitate opening. The patient steadily improved, and in a few weeks had perfect use of the joint.

Case 3.—E. F., a Swede, aged 25, painter. Feb. 19, 1886, at noon, while on his way to work he fell, striking his right knee on the ice. It caused him severe pain for a short time, but he worked the whole afternoon, standing on a step-ladder, without much discomfort. At night the knee began to swell and pain him intensely. When I saw him the knee was hot, very painful and moderately distended, and leg flexed. A liniment composed of opium, aconite and menthol was applied, with warm fomentation, and opium given internally. No improvement taking place, and the joint becoming much distended, on the 22d inst. I opened it with a bistoury, letting out a large quantity of blood-colored fluid. He was at once relieved of his intense pain. He made a steady recovery, and in about two months had perfect use of the joint.

Case 4.—S. H., aged 38, a carpenter. He had been at work on outside of building most of the winter, and of late had been obliged to kneel on scaffolding a good deal. When I saw him on Feb. 3, he told me his left knee had been painful and getting stiff for some time. It was then painful and contained a small amount of fluid. I could not convince him of the importance of giving it rest. I saw him occasionally during the following week, during which he was working about and simply using a liniment. On the 11th inst. the condition of the knee being decidedly worse, I told him unless he was willing to give me absolute control of the case, I should do nothing more for him. He was willing to submit, and I did not see him again for four days, when he sent for me. The joint was now moderately distended and the patella floating. I applied posterior splint and

elastic bandage, and the patient went to bed. Three days later, the joint being very full, I opened it with a bistoury, letting out a quantity of apparently unchanged synovial fluid. Immediate relief followed, and the bandage was reapplied. The patient was given quinine, iodide of iron, and the kidneys and bowels kept active. But the improvement was not permanent. The joint slowly refilled, and in three weeks it became necessary to again evacuate it. This time I used the aspirator, and an accident happened which I am quite sure will not occur to me again. Being ready to introduce the needle, I asked my friend who was assisting—a most careful and intelligent physician—to exhaust the aspirator bottle. All being ready, I passed the needle into the tissues until the opening near the joint disappeared, when I requested my assistant to turn the stop-cock, and as he did so I thrust the needle into the cavity of the joint. I was startled by a shriek of pain; and I have rarely seen such an agonized expression on any face. The muscles of the leg instantly became rigid and prominent, and the joint increased in size, but no fluid appeared. Fortunately the probable cause of the trouble at once occurred to me. The bottle had not been exhausted but filled with compressed air. The needle was withdrawn, the aspirator made ready and the fluid evacuated as intended. The air which had been driven into the joint bubbled out with the liquid. But the cellular tissue of the thigh contained air which could be felt for two weeks, by which time it had disappeared, leaving no ill effects. Apparently the joint was not injured by its forcible distension, though in four days it had become filled again, and I withdrew with the aspirator fluid of the same appearance as before. In just one week, the other knee having become similiarly involved, and the joint cavity very full, I aspirated it. From this time he steadily improved and made a perfect recovery.

I have intentionally omitted to speak of the anatomy of the knee, or of the pathology, diagnosis and classification of the cases I have briefly reported. But it would seem proper to treat them by pressure, absolute rest, and early, and if necessary, repeated evacuations. BARWELL, whose reputation in diseases of the joints is certainly second to no man's, says: "If the inflammation be sufficient to cause considerable secretion into the joint, producing marked fullness of the sac, the synovial membrane should be punctured * * * to relieve the tension."

HOWARD MARSH, in his work on "Diseases of the Joints," says:

"It is now well known that matter, whether connected with acute or chronic arthritis, may be safely evacuated, with the result that the severe suffering, the prolonged fever, the wide and destructive burrowing, and the formation of sinuses, which were the common rule only a few years ago, may be generally avoided."

CHICAGO MEDICAL SOCIETY.

Stated Meeting, July 5, 1887.

The President, W. T. BELFIELD, M. D., in the chair.

DR. E. B. WESTON presented a report of Cases of Synovitis of the Knee-joint (see page 366).

DR. G. J. TOBIAS: I think the paper is a very good one and the cases reported interesting. The doctor states that in two cases he made an incision before he aspirated; I would ask why he did it; why not try the aspirator first? The accident spoken of has occurred before in this city, that of compressing the air in the bottle instead of pumping it out and producing a vacuum, thereby causing compressed air to be forced into the joint cavity, with some times most serious results. Would it not be a good plan to have some basin or small receptacle at hand containing water, to try the aspirator first and see that it is in proper working order? I wish he would also tell us more fully how he used the posterior splint and whether he padded it, the material used for bandage, etc.

The President: I take it for granted that DR. WESTON took the ordinary, cleanly and antiseptic precautions before incising the knee-joint. Most of us would be inclined to use the aspirator before making an incision, since it is common observation that after the knee-joint has been aspirated once, twice, three times or more, resolution has occurred and the functions of the joint resumed even when the fluid was purulent. The accident in the use of the aspirator reminds me of one of which I am personally aware as occurring in this city, and which had a more unfortunate termination than in DR. WESTON'S case, where most of the air got into the tissue outside of the joint. In the case to which I refer the stop-cock was not turned until the needle had entered the joint, and in three minutes the patient was dead.

DR. E. B. WESTON, in closing the discussion, said:

I used the bistoury instead of the aspirator because it was more convenient at that time. The bistoury had been used a good many times; but I don't pretend to say it is better, perhaps not so good; but in my case it was a matter of convenience. The cases did well. The posterior splint was well padded with cotton. I used for the splint heavy sole leather. An elastic bandage, or rather a flannel bandage, was used below the knee and on the thigh, and a rubber bandage to make the pressure over the knee-joint. Of course the aspirator should have been tested. The mistake should not have

occurred. And yet no injury was done by the violent distension of the joint, or by the air which entered it.

DR. WM. T. BELFIELD reported

A CASE OF MERCURIAL NECROSIS, WITH SPECIMEN.

The case of mercurial necrosis that I wish to mention is that of a young man, apparently in excellent health, who seven years ago contracted a chancre, which was followed by the usual symptoms of constitutional syphilis. He was treated by a regular physician in an eastern city, and for a year and a half had the usual history of a healthy man contracting syphilis —mucous patches, occasional rashes on the skin, etc. After about two and a half years, during which time he was under constant observation and much of the time taking medicine, he had no further indication of constitutional syphilis. It went along that way for about four years. Over six years after the contraction of the chancre, he noticed a slight lump on the instep of the left foot, which gave a little pain when he wore tight shoes. Fearing this might be an indication of the return of the disease, he went to his physician who prescribed syphilitic treatment. He ordered the young man to take one-fourth grain of yellow oxide of mercury pill three times a day. The patient, who was naturally anxious to overcome any taint that might remain in him, followed the direction faithfully, and for six months took one of these pills three times a day. At the end of this time his mouth became sore. About ten days after he first noticed the soreness of the mouth, and being then in Chicago, he was directed to see me. At that time his gums were quite soft and spongy, his teeth felt loose and he could not bite bread with any comfort. On the left side the alveolar process of the upper jaw was exposed for about three-fourths of an inch in length and one-half inch in vertical breadth. The three molar teeth which were fixed in that portion of the jaw were decidedly loose. The hard palate corresponding to that of the alveolar process was swollen, and there were the usual symptoms of subacute periostitis. He was merely ordered to discontinue the mercury, use a simple mouth wash, and take iodide of potassium. In the course of ten days the portion of the jaw exposed was so loose that it could have been removed without difficulty, but the patient, flinching from the slight pain this would cause, declined to have it removed, and worked at it with his fingers until, about three weeks after I first saw him, he pulled the piece away. In the meantime he had lost thee sound molar teeth. The piece is quite small, merely large enough for the insertion of the three teeth, but it is of some interest. The upper surface of it is the floor of the antrum. During a part of the time the cheek bone was swollen and tender, but no abscess formed.

It may be questioned whether this necrosis was mercurial or syphilitic. The man unquestionably, seven years ago, had syphilis, but a little consideration shows that this necrosis was not syphilitic. In the first place, for four and a half years he has had no indication of syphilis; this little hardening of the instep, for which he took the mercury, still persists and is evidently not of syphilitic origin; furthermore, there was thickening and softening of the gums and loosening of the teeth, which was due to the mercury; and, lastly, while syphilis may cause necrosis of the long bones and of many other bones in the body, yet it rarely causes necrosis of the inferior and superior maxillary, while mercury causes necrosis in these bones with especial frequency.

DR. BELFIELD said, in reply to a question, that the patient had not been salivated during the time of treatment so far as could be remembered.

DR. JOSEPH HAVEN exhibited

A MECHANICAL SUPPORT FOR MAINTAINING THE LITHOTOMY POSITION.

The position most favorable for the majority of the operations on or about the perineum is that which is known as the lithotomy position. The patient prone upon the back, thighs sharply flexed on the abdomen, knees separated. For the patient to maintain this position unaided, is a difficult procedure, and when under an anæsthetic an absolute impossibility. Hence the necessity for assistance in some form. The usual custom is to entrust each limb to an assistant to hold during the operation. To this procedure there are some objections:

First, it increases the necessary number of assistants by at least two. Usually the patient, if not the whole household, is dreading the operation with nervous anxiety, and the sight of a number of assistants or an unnecessary display of paraphernalia does not tend to quiet their fears or relieve their anxiety; hence operations at the house should be conducted with as little display as possible.

Again, any one who has assisted in holding a patient in the lithotomy position for an hour or so, knows that it is a tiresome undertaking.

Again, emergencies are continually arising where these assistants are called upon to render other assistance, as from their proximity to the operator they are in the way of others, and are called upon to pass instruments, wash sponges, etc., thereby neglecting their *own work* and the falling of the patient's foot in

the operator's lap does not tend to *better* the results of the operation or improve the temper of the operator. Consequently it is not strange that various appliances should have been improvised by which the patient could be held in the proper position.

My attention was first called to this subject some six or eight years ago. The operation was for the closing of a lacerated cervix. The operator brought with him an apparatus made of three boards, about four feet long, joined on the sides by hinges. When the side pieces were raised and fastened by hooks the whole formed a sort of trough in which the patient was placed and a harness arrangement bound each limb to the corresponding side piece. While the apparatus worked well upon this occasion, there are still objections to it.

In the first place, it required too long a time to extricate the patient from the apparatus.

Secondly, the effect of putting together such a contrivance in the sick room might be similar to the building of a scaffold in the presence of the condemned.

Thirdly, blood stains are not easily removed from wood, and should there be any septic influence in the case this would be readily absorbed in the pores of the wood; and I doubt the advisability of using a wooden apparatus in repeated operations in close proximity to open wounds.

In a work entitled "Minor Surgical Gynæcology," by PAUL MUNDÉ, the author speaks favorably of an apparatus designed by DR. HAMILTON, of Harrisburg, Pa., which he styles "Hamilton's Gynapod." This consists of a piece of wood upon which the buttocks rest: from this arises on either side an arm surmounted by a crutch which supports the knee. While being more simple than the apparatus previously described, some of the same objections hold good in this case. Again, as the limbs are not fastened in any way, it allows too much freedom to the feet. This will be particularly annoying if the operation be a trivial one, not requiring the administration of an anæsthetic.

If then an apparatus for this purpose is of service in these operations, what should be the essential requirements?

First. It should be so constructed that it can be instantly removed if emergency should arise.

Second. It should be of material that will admit of its being thoroughly cleansed and disinfected.

Third. It should secure the patient firmly and at the same time be as simple, light and easy of transportation as possible.

Acting upon these thoughts, I had made, two years ago, an apparatus based upon the same principle as the one which I will show you this evening, namely, a light nickle-plated bar provided with a hinge in the center, allowing it to be folded up when not in use. This bar passes under the knees of the patient, holding them flexed on the abdomen by means of a band of webbing which passes around the shoulders of the patient; the webbing having a strap and buckle allowing the band to lengthen or shorten according to the size of the patient. Bands of the same material at either end of the rod securely hold the limbs below the knee; every strap being attached to the rod by means of a snap catch, which can be instantly disengaged if occasion so demands. A rod attachment for holding a fountain syringe completes the outfit The whole apparatus when not in use fits into a case eighteen inches long, five inches deep and four inches wide.

In this connection it becomes my duty, and at the same time a pleasure, to accord to DR. THOMAS B. MCBRIDE, of Philadelphia, the credit of having within the last few months devised an apparatus somewhat similar in principle to the one just described. A description of his apparatus was found in the Medical and Surgical Reporter for May. He writes me that he has, since that publication, added the hinge, thereby lessening the length of the apparatus when not in use.

In conclusion, I will add that I have found the apparatus serviceable in all operations where the lithotomy position is indicated, and particularly when operating for slight lacerations of the cervix where no anæsthetic was administered.

The President asked DR. HAVEN whether the apparatus answered as well when the patient was under an anæsthetic.

DR. JOSEPH HAVEN:

It answers better. I have used the apparatus a number of times with an anæsthetic and several other physicians have used it. The patient is liable to come out of the anæsthesia before the operation is finished, and with this apparatus he cannot do himself any harm during the operation

DR. TOBIAS asked DR. HAVEN in how many cases of laceration of the cervix he had tried the apparatus, and if the patient ever raised any objection to its use.

DR. HAVEN:

Probably twelve or fifteen. No objection has been made to the apparatus except in one case; but you will find that some patients object to any instrument. This patient asked me what it was, and when I explained that it was not an instrument of torture, she readily consented to its use. However, where an anæsthetic is to be given I do not usually put it on until the patient is anæsthetized, and they do not see the instrument at all. It can be put on in less than one minute and taken off in the same time. I very often use it in dressing wounds around the uterus, packing the vagina after opening a

pelvic abscess where I do not care to employ an assistant to hold the patient in the lithotomy position, or for slight operations on the rectum,—anything that would not require an anæsthetic.

Correspondence.

PICHI IN URINARY CALCULI.

An old lady, quite dropsical, and with an exceedingly irritable bladder, called me in May, 1887, to relieve her condition, especially the vesical irritation, which was so great that she could obtain no rest. This difficulty was aggravated at night. I used quite a number of medicines, and morphine was the only one that gave relief, and its effects were only temporary. I thought of pichi, and knowing I had nothing to lose, I gave the prescribed dose every three hours. The irritability and tenesmus were promptly relieved and have not since returned. I cannot believe that the case has been permanently cured, but the pichi did its business that time, and I have put the medicine in my case for future use.

Last Monday I was called in to a case of urinary calculus. It is needless to state that the pain was excruciating, and the vesical tenesmus considerable. Morphine and belladonna acted well in relieving the pain, but no safe nor reliable dose of either would quiet the bladder, and I thought it a good time to try the pichi. I gave it first on Wednesday. On Thursday the bladder was comfortable, the water flowing readily and without pain. On Friday the evidences of calculus were visible in the vessel. What share, if any, the pichi may have had in the expulsion of the calculus, I am unable to say, but upon the bladder, it worked well. I shall give the drug further trial, as opportunity offers, and shall report if anything occurs worthy of mention

DR. SEELY.

Faribault, Minn.

PROLAPSUS UTERI IN THE THIRD DEGREE —THOMAS' CLASSIFICATION.

On June 3, 1887, I was called to see a negro girl, aged 14 who had been complaining about a week, but as she was up most of the time her mother paid no attention to her until she was confined to her bed, and then did not enquire minutely about her sickness for several days; when on doing so she found that the uterus was protruding between the labia. I was then sent for immediately, and, after making an examination, came to the conclusion that it had been in that condition for several days, as gangrene had taken place. By passing my finger around it pieces would come away; while with the slightest pressure the fingers could be buried into the tissue, and the blood would flow freely between them. This was done without producing any pain whatever. After reducing it, which, to my surprise, I found to be very easily done, and with very little pain, I ordered vaginal injections of carbolic acid water, 1 to 40, every 12 hours, and raised the foot of the bed about eight inches so as to help reduce the the congestion of the pelvic viscera. I then put her on milk diet, and gave her 5 grains of quinine three times a day. Recovery was very satisfactory; she had slight hemorrhage after reducing uterus; temperature ranged from 100° to 102° F.; the discharge and sloughing stopped in about a wek.

JULIAN A. NORFLEET, M.D.

IVOR, VA.

LAFAYETTE MIXTURE.

Will you be so kind as to give your readers the formula or formulæ most in vogue for the "Lafayette mixture," as I understand that more than one formula passes current as the correct one?

[The old formula for the Lafayette mixture was:

℞ Bals. copaibæ ʒ ss,
Liq. potassæ ʒ ij,
Spts. etheris nitrosi ʒ ss,
Muc. gum acaciæ ʒ iv.
M.
Dose, a tablespoonful after eating.

To correct the nauseating effects of this mixture the following modification was made by BUMSTEAD and is now the more generally employed:

℞ Bals. copaibæ
Spts. nitrici dulcis ää ʒ j,
Liq. potassæ ʒ ij,
Extr. glycyrrhizæ ʒ ss;
M. et adde
Ol. gaultheriæ gtt. xvj,
Syr. acaciæ ʒ vj.
Dose, a teaspoonful after eating.]

MR. ERICHSEN, an old and respected citizen, and the father of DR. ERICHSEN, the ardent advocate of cremation, of this city, died here last week. MR. ERICHSEN was also a cremationist, and his remains were taken to Buffalo and incinerated, the ashes being brought home and deposited beside those of his wife, whose remains were cremated some two years ago. The local cremation society has its new crematorium well under way, and the necessity of sending the remains of its members to a distant city will soon be obviated.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., AUG. 25, 1887

Editorial.

PHYSICIANS TO REPORT WHOOPING-COUGH.

The statutes of Michigan require that cases of small-pox, diphtheria, scarlet fever and other diseases dangerous to public health, be reported by the physician in charge to the constituted local boards of health officers. In the case of the three diseases specifically mentioned, the law has been very strictly observed, but no one has, to our knowledge, assumed to add any other disease to the list of such as are thus by the constituted authorities declared to threaten public health. The latitude allowed by the statute has unquestionably exposed the public to contagion which it were very desirable to avoid. A logical sequence to the microbic theory of disease, would be the quarantining of cases of a number of the affections the occurrence of which occasions no alarm in a community, but which are. nevertheless, accompanied by a very high death-rate. Consumption, for instance. is the most deadly of the diseases which afflict man in these latitudes, and there remains little or no doubt in scientific minds that it is communicable through the the medium of the bacillus Kochi which permeates the air in the vicinage of the afflicted. Yet consumptives are allowed the utmost freedom of intercourse with the public, and not the least effort is made to prevent them from communicating to others the disease which is more surely fatal than either small-pox, diphtheria or scarlet fever. This condition of affairs is certainly an incongruity, in a state which prides itself on the possession of a scientific board of health.

An effort to add another to the specified test of diseases dangerous to public health, has just been made by DR. H. B. BAKER, Secretary of the Michigan State Board of Health. The reply of the Attorney-General to a communication from DR. BAKER, explains the whole matter:

"You call my attention to sections 1675 and 1676 of HOWELL'S Statutes requiring physicians to report cases of small-pox, diphtheria, scarlet fever, and any 'other diseases dangerous to the public health,' and ask whether whooping cough is included in this provision.

"These sections were amended by act number 11 of the laws of 1883, the reading of which in this particular was not changed.

"You state that the question has arisen whether whooping-cough is included in this provision. This would seem to be a question for a medical practitioner rather than a lawyer.

"There can be no question that any disease which is liable to produce death is one dangerous to the public health. You call my attention to the report of DR. WM. SQUIRES, of the London Epidemiological Society, who says of whooping-cough: 'It is one of three diseases most fatal to young infants. * * * Whooping-cough comes next to scarlet fever in the number of deaths attributed to it in this country' (England).

"You also call my attention to the fact that the reports to the office of the Secretary of State of Michigan, for the years ending with 1882, show the average deaths from small-pox each year to be 53, and from whooping cough 156, about three times as many as small-pox.

"From these statements and references as well as from that which is common knowledge to everybody, that whooping cough is often the cause of death among infants, there would seem to be no question but that it is included in the language of the act referred to, and that it is made the duty of physicians attending cases of whooping cough to report the same to the health officer or clerk of the board of health as the law provides."

It clearly now remains for the State Board of Health to exact an enforcement of the law as thus interpreted, and we feel quite confident that the profession will cordially endorse all efforts in this direction in the case of whooping-cough.

SALOL IN BOWEL COMPLAINTS.

It is alleged of salol that it passes through the stomach unaltered and is changed in the intestines into salicylic acid. Theoretically, therefore, the drug supplies a long-felt want in the treatment of affections of the bowels due to the presence in them of decomposing matter, and DR. A. H. GOELET reports in the N. Y. Medical Journal the result of cases treated by him according to this theory. Without wearying the reader with detailed reports of his cases, he avers that salol is the only purely satisfactory remedy he has ever employed in conditions due to, or aggravated by, the cause mentioned. The dose for an adult is ten grains. Children may be given much larger doses than the usual proportion to that given the adult. To a child six months old, or under, half a grain to three-quarters of a grain may be given every

two hours. A child one year of age may be given from a grain to a grain and a half.

The application of salol in bowel complaints, says DR. GOELET, is very extensive. He has used it in all with the same pronounced success. In typhoid fever, every three hours, there is nothing better. While he cannot say that it shortens the attack, it relieves the excessively disagreeable odor of the fæces and the tenesmus produced by the accumulation of wind in the colon, and he knows of nothing which so satisfactorily relieves the accumulation of wind in the bowels in any condition.

In one case in which there was looseness of bowels with fever 100° to 100.5° F. in the morning, with an increase of one degree in the evening, with tenderness in the right iliac region and a typhoid odor to the stools, which were green, showing strong suspicion of typhoid fever, salol in ten-grain doses every two hours relieved the condition, and in a week the symptoms had disappeared.

Diarrhœa and dysentery of children in summer is more promptly relieved by salol than anything else, and DR. GOELET outlines a general course of treatment for these cases. To begin with, stop all food for twenty-four hours. If the little patient is thirsty, use a decoction of salep cold. This is made as follows: A saltspoonful of powdered salep is rubbed into a paste in a cup with a tablespoonful of *cold* water and a pint of boiling water added slowly, stirring it all the while. This is set on the ice, and, when *cold*, it may be given to the child almost *ad libitum*, but in small quantities at a time. Give the salol in appropriate doses every two hours until there is marked improvement in the bowels, and apply something warm to the abdomen. In the majority of cases the little patient will be ready for food in twenty-four hours. This should then be given in small quantities at first, and it must be of the proper kind.

Milk is unreliable in hot weather because of its extreme proneness to develop tyrotoxicon. The same objection holds for artificial foods which require the addition of milk at that season of the year.

Most of these foods also contain starch, which is likewise seriously objectionable to an infant under one year with weak bowels.

THE INTERNATIONAL MEDICAL CONGRESS.

Before the next issue of the AGE the long-looked-for and much-advertised ninth International Medical Congress will have been held. It will open in Washington, D. C., on Monday, September, 5th. The following programme of arrangements for the meeting has been prepared:

First day.—Monday, September 5.—The Congress will assemble at Albaugh's Opera House at 11 A. M., and will be formally opened by the President of the United States, to be followed by a short address of welcome by the Secretary of State; Address by the President of the Congress; Report of Secretary-General and Chairman of Committee of Arrangements. Adjourn at 1:30 P. M. From 3 to 6 P. M., meeting of the Sections at their respective halls. Evening *conversazione* at U. S. Pension Hall from 8 to 11 P. M.

Second Day.—Tuesday, September 6.—Meeting at 10 A. M. at Albaugh's Opera House. General Addresses by DRS. FLINT and SEMMOLA. Sections will meet at 11 A. M., and adjourn at the same hour with Congress at 1 P. M. In the afternoon the Sections will meet from 3 to 6 P. M. In the evening it is expected that a reception will be given by the President of the United States, and the Corcoran Art Gallery will be thrown open to the members and their families.

Third Day.—Wednesday, September 7.—The Congress will meet at 10 A. M. General Addresses until 1 P. M. The Sections will meet as usual at 11 A. M., and adjourn at 1 P. M. Afternoon meeting of the Sections from 3 to 6 P. M. Evening reception to the members and their families by the citizens of Washington.

Fourth Day.—Thursday, September 8.—General meeting at 10 A. M. Addresses, if not previously delivered. Meeting of the Sections at 11 A. M.; adjourn at 1 P. M. Afternoon, Sections meet from 3 to 6 P. M. General reception buffet banquet at U. S. Pension Hall from 8 to 11 P. M.

Fifth Day.—Friday, September 9.—General meeting at 10 A. M. Transaction of business affairs of Congress. Meeting of Sections at 11, and adjourn at 1 P. M. Afternoon, Sections meet from 3 to 6 P. M.

Sixth Day.—Saturday, September 10.—Generrl meeting at 10 A. M. Adjourn at 11 for visit to Mt. Vernon.

On Sunday or Monday, the day not yet determined upon, an excursion train will leave Washington with the foreign members and their families for Niagara Falls, under the escort of a part of the committee of arrangements, selecting the route which will afford our foreign brethren an opportunity to see some of the most interesting and thrifty portions of our country, as well as very beautiful scenery.

In completing the details of this programme it may be necessary to make some slight modifications.

This programme certainly outlines a pleasing and profitable meeting, and as the railroads will hold out further inducements in the way of reduced fares, the attendance will, doubtless, be large and in keeping with the greatness of the country whose Capital is honored with the

meeting. It is, probably, not necessary for us to repeat that all members of the medical profession in good standing are eligible to membership in the Congress. The fee has been fixed at ten dollars, and this entitles the member to a copy of the Transactions.

A CONVENIENT TRUSS FOR INFANTS.

Everyone has experienced difficulty in securing a properly fitting truss for hernia in infants. In a case in which we had tried without success several varieties, we resorted to an old device recently revived by a writer in the British Medical Journal, and were much pleased with the result. It was devised by an "old woman," and first described by WILLIAM COATES in the Medical Times, in 1848, as follows:

"Worsted known as Berlin wool is made into a skein of 20 threads, which stretched out straight shall be about 22 inches long, the threads being tied across at intervals of two or three inches, to keep them together. One end of the skein is placed over the abdominal rings. The folded worsted is passed horizontally across the abdomen, over the line of the crest of the pelvis to the opposite side, round the hips, behind the pelvis and over the hip on the side of hernia. The folded end is then passed through the loop of the skein, and will here form a knot or bulged portion, which must be carefully adjusted so as to lie against the hernial opening, and, being carried down the upper part of the thigh between it and the scrotum (in the male), it is brought round the external side of the thigh near to the great trochanter, and there tied or fixed with a safety pin to the band of worsted already round the pelvis.

In the case in which we employed it twenty threads seemed insufficient and we increased the number to thirty. The elasticity of the woolen fibre keeps up equable and sufficiently firm pressure. No pad must be employed other than that made by the duplicate in the band, and the application is so simple that no nurse can have any difficulty in making it.

Notes.

It is an old saying that one must go away from home to learn the news, and it receives an illustration in an article by DUPUY (of France) in Memorabilien. "In the United States of North America," says this observer, "where strong coffee is largely used, men otherwise healthy frequently complain of impotence, or at least of incomplete erection. When the coffee is discontinued, we are told, these difficulties disappear, only to return, however, on a resumption of the beverage." It will so surprise most of our readers to learn that men in the United States of North America are thus afflicted, that they will hesitate to believe that coffee is such an anaphrodisiac.

The Health Officer of Detroit estimates the population of the city at 180,000, according to which the annual death-rate, as computed from the mortality during last month, is announced as 38 per thousand. These figures are, unquestionably, too high, and are due to the low estimate of the population of the city, the growth of which since the decennial census of 1880 (which showed a population of 117,000) has been very rapid. The city cannot afford to have such a death-rate published to the world, and some means should be adopted to determine with certainty the basis on which to make the computation.

In answer to a correspondent: The American Physicians' Association referred to is, probably, the association which was founded by members of the profession who combine literary degrees with their degrees in medicine. They hope by thus securing a higher standard of literary attainment among its members to ensure better work in the direction of medicine. Whether they will succeed remains yet to be demonstrated Certainly such work as has appeared in their published transactions is not markedly superior to that of the American Medical Association, membership in which is not conditioned on the possession of the degree of B. A.

Apropos of the question of physicians taking recreation in the game of base ball, it is related of a certain Detroit doctor that his antipathy to the game prevents him from giving his professional aid to any unfortunate who may have been injured therein. On a recent occasion a young man who applied to him to dress a scalp wound received from a "foul tip," was unceremoniously ordered out of the office, with the information that the wounded in such a game deserved no consideration at the hands of even a humane doctor. Verily, the cranks are not all base-ball cranks.

In September DR. GEORGE H. ROHE, of Baltimore, will assume the editorship of a quarterly journal, The Climatologist, devoted to the scietific and practical consideration of questions in the domain of medical and sanitary climatology, including climato-therapy, medical geography, epidemiology, preventive medicine, and the investigation of the merits of mineral springs and health resorts. Many of the most eminent climatologists, sanitarians and practitioners have consented to act as collaborators on the new journal.

The Medical World perpetrates the following in reply to a question as to the value of the Bergeon treatment of consumption: "It cer-

tainly detracts the mind of the patient for a while and may do good by its moral effect, by making him think of his latter end. He becomes, as it were, conscious of his rectum, or, as the school-boy renders it, *mens conscia recti*. He may even bacilli enough to cherish the hope that he is being cured, and is taking a short cut to health over his pons asinorum, but we regret to say that he will find the road to end as it begun—in gas."

For the benefit of timid Westerners, we would state that we have it on reliable authority that the buffet banquet, which is announced as one of the social attractions on the occasion of the coming International Congress, is an entirely harmless affair. The buffeting which may be indulged in need not deter any one from attending; it is said to be of a kind which is pleasurable rather than otherwise.

Frozen rabbits, according to a Chicago butcher, will keep forty days. If at the end of that time a purchaser has not appeared, the rabbit is taken in charge by the canned meat men, and is sent forth to the world to do duty as canned chicken.

CARDINAL GIBBONS, of Baltimore, has proclaimed against cremation, declaring that the Catholic Church discourages it as "at variance with the practice of the people of God in the old dispensation and opposed to the cherished traditions of the Christian religion."

A patient on being told by his physician that the chances were much against his recovery took consolation in the fact that "most of the trouble he had had in life never happened." Under the inspiration of this sage reflection, he pulled himself together and got better.

A Pittsburgh doctor announces on his sign that he "will be hear on fridys and satterdys only," and the crowds which assemble on these days to see the man with the bad spell are said to be quite remunerative.

MR. WILLIAM NYE says that although not belonging to the Knickerbocker family he was on one occasion so deeply incensed, that his breath came in short pants.

A student in the Albany Medical College when asked how he would treat a corpulent man, replied that he had found that they usually take beer.

The physician who is jealous of a rival acknowledges his own inferiority.

Book Notices.

CYCLOPÆDIA OF OBSTETRICS AND GYNÆCOLOGY. A Handbook General and Operative Gynecology. By Dr. A. Hegar, Professor of Obstetrics and Gynecology, and Director of the Gynecological Clinic at the University of Freiburg; and Dr. R. Kaltenbach, Professor of Obstetrics and Gynecology, and Director of the Gynecological Clinic at the University of Giessen.

DISEASES OF THE FEMALE URETHRA AND BLADDER, by F. Winckel, M. D., Professor of Obstetrics and Gynecology at the Royal University, Munich; and Diseases of the Vagina, by A. Breisky, M. D., Professor of Obstetrics and Gynecology at the Royal University, Vienna. With ninety-five fine wood engravings. Edited by Egbert H. Grandin, M D., Obstetric Surgeon to the New York Maternity Hospital, Instructor in Gynecology at the New York Polyclinic, etc.
New York; William Wood & Co.

These are, respectively, volumes six and ten of the Cyclopædia of Obstetrics and Gynecology now being issued by MESSRS. WILLIAM WOOD & CO., and which when completed will comprise twelve volumes. The irregularity in the appearance of the volumes of the set is due to the difference in the rapidity of the work of the several translators, and in order to ensure the completion of the whole in the early autumn, the volumes are being issued as they come into the hands of the printers. We have, in noticing the previous volumes, outlined the scope of this comprehensive work. In the numbers before us we can detect no letting down in the excellence which has characterized the work up to the present time. While it may seem a reversal of the natural order for Americans to go to Germany for literature on a subject in which America undisputedly takes the lead, it must be remembered that aside from being original the German is also a great plodder, and is thoroughly familiar with all that has been done and is being done in his specialty by the outside world. The work before us, therefore, is not purely German, but contains what is contributed by all, irrespective of nationality, who have added to the store of knowledge in this important division of medicine, and a more comprehensive work than this on its subject will, unquestionably, not exist when it has been fully completed.

PRACTICAL LESSONS IN NURSING, MATERNITY, INFANCY AND Childhood. Hygiene of Pregnancy; nursing and Weaning of Infants; the Care of Children in Health and Disease. By John M. Keating, M.D., Visiting Obstetrician and Lecturer on the Diseases of Women and Children, Philadelpeia Hospital (Blockley), Fellow of the College of Physicians of Philadelphia, etc.
Philadelphia: J. B. Lippincott & Co.
Detroit: John MacFarlane.

This very practical little book is adapted especially to the use of mothers or those intrusted with the bringing up of infants and

children, and training schools for nurses, as an aid to the teaching of the nursing of women and children. That there is a demand for a work with this purpose, by an educated physician, and divested of the empiricism which detracts from the ordinary "popular" treatises, is painfully apparent in the practice of every physician. DR. KEATING has done a good work in preparing this book, and a perusal of it will satisfy any practitioner that he can safely put it into the hand of an intelligent woman to be her "guide, philosopher, and friend" in her great work of rearing children.

THE DIAGNOSIS AND TREATMENT OF HÆMORRHOIDS, with General Rules as to the Examination of Rectal Diseases. By Charles B Kelsey, M.D., Surgeon to St. Paul's Infirmary for Diseases of the Rectum; Consulting Surgeon for Diseases of Rectum to the Harlem Hospital and Dispensary for Women and Children, New York.

THE MODERN TREATMENT OF DISEASES OF THE HEART; a Manual of Clinical Therapeutics. By Prof. Dujardin-Beaumetz, Member of the Academy of Medicine, and of the Council of Hygiene and Salubrity of the Seine; Editor-in-Chief of the Bulletin General de Therapeutique, etc., etc. Translated from the fourth French Edition, by E. P. Hurd, M.D., President of the Essex North District Medical Society; Member of the Massachusetts Medical Society, etc., Newburyport, Mass.
Detroit: George S. Davis.

These are two numbers of The Physicians' Leisure Library, which has grown into such rapid and well-merited popularity with the profession. This popularity is due to the combination of inherent literary worth, excellent mechanical execution and remarkable cheapness which characterizes the Library. The aim of the authors is apparently to combine comprehensiveness with conciseness, thus enabling the physician whose time for systematic reading is limited, to make the best possible use of the snatches of time he may be able to take from the more pressing demands of practice. DR. KELSEY'S brochure on hæmorrhoids is very timely. Singularly enough the treatment of this annoying, and often serious affection has been largely given over to uneducated practitioners who often display a boldness in their methods which borders on intrepidity, even as "fools rush in where angels fear to tread." For this the profession is itself mainly responsible, and the general distribution of the little work before us which the large subscription list of this library series will ensure, will do very much towards correcting the anomalous state of affairs. The author is very explicit in his treatment of his subject, and the illustrations being excellent no one who carefully reads the book will lay it down disappointed.

DUJARDIN-BEAUMETZ is known for his faculty of combining instruction with entertainment in his style, and DR. HURD, whose translations of the writings of this distinguished French author has made them quite familiar to the profession of this country, suffers none of these qualities to be lost in his rendition of them into English. The little work before us is one of the most practical of his efforts. It, moreover, treats of a subject on which. it is to be feared, the profession has rather vague conceptions. He has not endeavored to cover the whole field comprised in the term "heart-diseases," but has confined himself to such as are of most common occurrence, viz., lesions of the mitral and aortic valves. He makes the strong practical point that while these lesions are not satisfactory subjects of therapeutics, the consequences of them are capable of being mitigated and ameliorated. Ordinarily treatises on diseases of the heart are somewhat mystifying to the general practitioner, but DUJARDIN-BEAUMETZ has the faculty of obviating this objection. The book is singularly rich in therapeutics.

Therapeutic Brevities.

ABORTIVE TREATMENT OF FURUNCLES.—Boils are now held to be due to the entrance beneath the skin of a micro organism called the staphylococcus pyogenes. DR. LOUIS HEITZMANN (Medical Record) has had good success in destroying this parasite (and, consequently, in aborting furuncles), by applications of salicylic acid after the following formula:

℞ Acidi salicylici, ʒ ii.
Emplast. saponat., ℥ ii.
Emplast. diachyl., ℥ i.
M.

NAPHTHOL IN EXCESSIVE SWEATING OF EXTREMITIES AND THE AXILLA.—The Journal de Medicine et de Chirurgie recommends against excessive sweating of the extremities or of the axillary the following lotion:

Naphthol, 5 parts.
Glycerin, 10 parts.
Starch, 100 parts.

After having applied this lotion, the parts are to be dusted with the following powder:

Powdered naphthol, 2 parts.
Powdered starch, 100 parts.

In excessive sweating of the feet little cotton balls saturated with the powder may be inserted between the toes.

IODOFORM IN PHTHISIS.—HUCHARD combines iodoform with creasote in the treatment of phthisis as follows:

℞ Iodoform,
Creasote,
Pulv. benzoin,
Balsam tolu, of each gr. j.
M. Sig.—Two to four pills daily.—*Journal de Medecine.—Med. News.*

Iron Lemonade.—The following method of prescribing the muriated tincture of iron is recommended as being the most palatable, elegant and altogether satisfactory, ever yet offered to the public:

Mur. tinct. iron, 4 drachms.
Acidi phos. dil., 6 drachms.
Spirits of lemon, 2 drachms.
Syrup simple, 2 ounces.

Two teaspoonfuls in water after each meal. The spirits of lemon is preferred to the syrup of lemon, as the latter would render the mixture too acid. We have found the above combined with pepsin an excellent tonic when indications are associated with feeble digestive powers.

A Substitute for Iodoform.—Chassaignac (New Orleans Med. and Surg. Jour.) recommends the oxyiodide (subiodide) of bismuth as an efficient substitute for iodoform. He describes it as of a bright brick-red color, impalpable when well powdered, almost odorless and tasteless, insoluble in water, alcohol, ether, or chloroform, and not imparting its color to linen It may be made, he says, so as to cost only from $3 to $3.50 a pound, although ten years ago, when it was recommended by Dr. A. S. Reynolds, its cost was a bar to its general adoption Dusted on a raw surface, it produces a thin, silvery film, but causes no stinging. The author gives the following formula for its preparation, devised by Mr. J. W. England, and published in the American Journal of Pharmacy:

Bismuth subnitrate, 174 grains.
Nitric acid, 3 fluidounces.
Hot water, 12 fluidounces.

Dissolve the bismuth salt in the acid in a capsule with the aid of heat, and add the water gradually, stirring after each addition; then add the solution gradually to a solution of 663 grains of potassium iodide in 28 ounces of hot water, agitating well after each addition. The agitation should be continued until the decomposition is complete; then the precipitate should be filtered out at once, washed with warm water, dried, and powdered.—*N. Y. Medical Journal.*

Spirit of Ether as a Corrigent of Opium.—Dr. A. G. Auld (Lancet) remarks that there are few drugs more commonly prescribed than opium, and none more abused or carelessly combined. None of the official preparations are quite destitute of the disagreeable after-action of the pure drug—that of causing headache, nausea, and loss of appetite—due to its intestinal secretion. Atropine, while to a certain extent it antagonizes the action of opium on the central nervous system, rather adds to its effects on the alimentary secretions. The author has observed good results from giving opium in conjunction with ether, which, he says, is one of the most powerful stimulants of secretion that we know of. He generally prescribes equal parts of tincture of opium and spirit of ether. [We presume the author refers to the spiritus ætheris of the United States and British Pharmacopœias. Concerning the spiritus ætheris *compositus* (Hoffman's anodyne), the authors of the United States Dispensatory say: "This preparation is on many occasions a useful adjunct to laudanum, to prevent the nausea which is excited by the latter in certain habits."]—*N. Y. Medical Journal.*

Agaricin for Night Sweats.—Young recommends the following combination: ℞. Agaricini, gr. viij; pulv. ipecac et opii, gr. cxx; althæ pulv. and mucilag. acaciæ, ää gr. lx. Met. et div. in pilulæ, No. 100. S. One or two to be taken at night.

In the Bellevue Hospital the following combination has been used with excellent results: ℞. Agaricini (Merck's) gr. x; atropinæ sulph., gr. j; acidi. sulph. arom. M. 1200. M. et filter. Dose, 10 minims contain $\frac{1}{10}$ of a grain of agaricin, $\frac{1}{120}$ of a grain of atropine sulphate, and 10 minims of aromatic sulphuric acid. To be given in syrup or simple elixir.—*Kansas City Med. Record.*

A Useful Powder for the Treatment of the Uric Acid Diathesis.—Druitt is quoted by the Journal de Médecine de Paris as prescribing as follows:

℞ Borac. pulver., gr. 15.
Sodii bicarbon. pulv.,
Potass. nitrat. pulv., ää gr. 8.
for each powder.

To be taken three times daily in abundant fluid.—*Med. News*, July 9, 1887.

A Remedy for Lumbago.—According to an exchange, Prof. Burggraeve recommends the application of a mixture of equal parts of collodion, tincture of iodine, and ammonia-water, applied widely over the affected region with a camel's-hair brush, as an "instantaneous" remedy for lumbago.—*N. Y. Med. Journal*, July 16, 1887.

Medical Progress.

LITHIUM CARBONATE AND SODIUM ARSENIATE DISSOLVED IN CARBONIC ACID WATER, IN THE TREATMENT OF DIABETES MELLITUS.—DR. AUSTIN FLINT, in Medical News, July 9th, 1887, presents notes of ten cases of diabetes mellitus treated by lithium carbonate and sodium arseniate dissolved in carbonic acid water. We omit the notes of cases. DR. FLINT'S comments and conclusions as to this method of treatment are as follows, viz:

At a recent meeting of the Therapeutical Society of Paris, DR. MARTINEAU made a brief communication, in which he stated that for several years he had treated cases of diabetes mellitus with a solution of lithium carbonate and sodium arseniate in ordinary carbonic acid water, to the exclusion of every other medicinal remedy, and with a moderately strict anti-diabetic diet. DR. MARTINEAU claimed that he had cured sixty-seven out of seventy cases of arthritic diabetes by this method of treatment, which he had borrowed from a practitioner now dead, the late PROF. ROUGET, of Paris. The communication was discussed by DR. DUJARDIN-BEAUMETZ and others, who regarded the method as so simple and, to say the least, innocuous, that it was worthy of trial.

The preparation recommended by DR. MARTINEAU was the following: Into an apparatus such as is commonly used in Paris for extemporaneously making carbonic acid water, are put twenty centigrammes of lithium carbonate and a tablespoonful of a solution of twenty centigrammes of sodium arseniate in five hundred grammes of distilled water The quantity of carbonic acid water used is about one litre. This quantity is to be drunk by the patient during each day, either by itself or mixed with ordinary wine at meals.*

The simplicity of the proposed remedy led me to make an effort to test its efficacy in certain obstinate cases under treatment for diabetes. I endeavored first to have the agents introduced into the ordinary siphons of soda-water prepared and sold in New York; but the manufacturers were unwilling to do this, and I was forced to adopt some other method of preparation. It was finally suggested to me to put up the preparation in ordinary beer bottles with patent stoppers which could be replaced after using a certain quantity. This is now done by MR. THEODORE ANGELO, apothecary, 460 Fourth Avenue, New York City, who has supplied the patients to whom the remedy has been given. Two of these bottles make the equivalent of the quantity administered daily by DR. MARTINEAU.

I was not prepared to make a trial of the remedy before the middle of April, and have used it since then in but three cases—a time too short, and a number of cases too small to admit of anything like definite conclusions. However, in the hope of inducing others to make similar trials, I venture to present the imperfect results of my own brief experience.

The general result of the observations on the three cases reported is quite indefinite. The effects of the solution of lithia and arsenic were not well marked, and the slight improvement under its might have been due to other causes. I shall, however, continue the remedy in these three cases and employ it in other cases until I shall have given it a fair trial; but I do not feel that it would be prudent in any case to relax the dietetic treatment.

With other so-called specifics for diabetes mellitus I have had some experience.

I have given calcium chloride in a number of cases with entirely negative results.

In several cases I have used jambol, also with negative results.

I have never given opium, except for the relief of pain and insomnia; but in cases in which it has been used it has been well tolerated.

I nearly always prescribe at first Clemens's solution of the arsenite of bromine. This remedy does no harm, and in many cases it seems to exert some control over the thirst, polyuria, and the quantity of sugar in the urine.

I invariably interdict the use of milk and skim-milk. In a number of cases, in which it has been taken by patients on their own responsibility, I have observed that it promptly induces thirst, polyuria, and an immense increase in the discharge of sugar. In some instances, in which my published diet-table has been copied, milk has been added. This addition, it seems to me, is most unwarrantable; and the use of milk more than counteracts the beneficial results to be expected from the anti-diabetic diet properly carried out.

For the past three years I have recommended a gluten bread made by GEORGE V. HECKER & CO., of New York. This bread at first contained between two and five per cent. of starch. Within a year, however, it has seemed to act unfavorably. I have lately had a number of analysis made of this bread, and it has been found to contain about thirty per cent. of starch. Within the last two months I have temporarily abandoned its use, although this has greatly increased the difficulties of the dietetic treatment. It is to be hoped, however, that the MESSRS. HECKER, who are untiring in their efforts to produce a satisfactory and uniform anti-diabetic bread, will soon perfect their process, so that the bread will be entirely reliable. This will require a more simple chemical process of control, the ordinary methods of ultimate analysis for starch being tedious and expensive.

I have not been able to study the details of the seventy cases mentioned by DR. MARTINEAU, sixty-seven of which he reported as cured.*

The experience of all who have followed out any considerable number of cases of diabetes teaches that the disease is almost always liable to return under a careless diet; and my own experience is no exception to this general rule.

---

* Bulletin et Mémoires de la Société de Thérapeutique, Paris, 30 Mars, 1887, 18e année, No. 6, p. 41.

Reduced to the English standard, the formula would be about as follows:

Lithium carbonate, 3 grains.
Sodium arseniate, 1-10 grain.
Carbonic acid water, 2 pints.

This formula has been published in a number of medical journals. In some it is stated that a teaspoonful of the solution of sodium arseniate is used instead of a tablespoonful. This error arises from a faulty translation of "cuillerée à bouche," which means a tablespoonful. The term for a teaspoonful is "cuillerée café.

* A brief account of three cases, treated by DR. MARTINEAU, is given in the Therapeutic Gazette, Philadelphia, May 16, 1887, p. 330.

That such an exception should have occurred in the experience of DR. MARTINEAU would, indeed, be remarkable.

Including the three cases already briefly reported, I have now under observation and treatment ten cases which I have followed for variable periods. It may be interesting to compare seven of these cases with the three treated with the solution of lithia and arsenic.

The ten cases reported are all that are now under my immediate observation. At the risk of being tedious, I have given certain details regarding these cases, although my records have been considerably abridged in this article. These cases seem to me to be quite instructive. Taken in connection with my other recorded cases, they lead me to the following conclusions:

1. In the three severe cases in which I have used the solution of lithium carbonate and sodium arseniate in carbonic acid water, no very marked effects have been observed in the few weeks during which the remedy has been employed; but the treatment seems to me to be worthy of more extended trial, and it may be useful in mitigating the severity of a strict anti-diabetic treatment.

2. The so-called specifics for diabetes have little if any effect. An exception, however, may be made in favor of the arsenite of bromine, which has sometimes seemed to me to control, to a slight extent, the thirst, polyuria, and discharge of sugar.

3. The main reliance in treatment is to be placed upon an anti-diabetic diet. This has fallen somewhat into disrepute because it is seldom efficiently carried out. In no single instance, out of ninety-nine recorded cases, have I found that the anti-diabetic diet had been enforced.

4. Milk should be absolutely interdicted. Its influence over the progress of the disease is prompt, powerful, and most injurious.

5. There are certain cases in which dietetic treatment promptly arrests the disease and keeps it under control. There are other cases in which treatment seems to be of little avail, except in possibly retarding the progress toward a fatal result. Of the ten cases reported, and now under observation, seven are amenable to treatment and three are obstinate.

6. A confirmed diabetic may be cured, in the sense that all symptoms will disappear; but the disease is liable to return at at any time under an unrestricted diet. Still, moderate care in diet will often secure immunity.

7. A patient who has once had diabetes should have his urine examined every few weeks. The glycosuria always precedes the general symptoms of the disease, and these general symptoms can generally be forestalled by proper treatment employed as soon as sugar makes its appearance in the urine.

8. As the disease returns, either from imprudences in diet or from other causes, the successive recurrences present greater and greater difficulties in the way of treatment.

THE AMMONIA TREATMENT OF FEVER.—Our readers will remember that in the Journal of October 10, 1885, we called attention to a paper by DR. S. K. JACKSON, of Norfolk, Va., on the "Ammonia Treatment of Typhoid Fever," in which this treatment was based on the idea that the most important therapeutic indication in typhoid fever was to supply nitrogenous waste. Still more recently was published, in the Journal of December 11, 1886, a paper by DR. J. R. BARNETT, of Neenah, Wisconsin, entitled "Salicylate of Ammonium in the Treatment of Typhoid and Septic Fevers and Inflammations." His conclusions are too many and long to be repeated here, but his paper, as well as that of DR. JACKSON, will repay another reading in connection with the latest contribution to the subject, a paper read by DR. J. D. SULLIVAN, of Brooklyn, before the recent meeting of the Fifth District Branch of the New York State Medical Association, on the "Therapeutic Effects of Ammonium Salicylate." Being favorably impressed with the theories and results presented by DRS. JACKSON and BARNETT, DR. SULLIVAN determined to give the ammonium salicylate a careful trial.

The first case in which he had the opportunity of doing this was one of typhoid fever in a young man. He found him presenting a suffused countenance, furred tongue, dry skin, and temperature 102°, with tenderness over the abdomen and the general characteristics of a case of typhoid fever, the diagnosis of which was further strengthened by the fact that it had occurred in a neighborhood in which DR. SULLIVAN had a short time previously attended six undoubted cases of the disease. After evacuating his bowels with a small dose of calomel, to which was added one grain of powdered ipecac, he prescribed gr. viij of salicylate of ammonium, in a solution of glycerin and water, every four hours. On the next day he found the temperature reduced to 100°, the skin moist, and the general condition of the patient somewhat improved. On the following day the improvement was more marked, and the ammonium salicylate was reduced to gr. viij four times a day. He continued to improve daily, and on the fifth day of his attendance DR. SULLIVAN found him dressed and sitting up; nor could any amount of persuasion induce him to return to bed. His temperature was normal, and he complained of nothing but weakness. He continued to take the remedy in the same dose three times a day, in addition to a tonic containing quinine, and improved so rapidly that within two weeks from the time of the doctor's first visit he was able to return to his business. In commenting on this case DR. SULLIVAN remarked that, while it was well known to the profession that mild cases of typhoid fever are occasionally met with which run a comparatively short course, he could feel but convinced that in this instance the disease was favorably influenced by the special remedy employed. While he did not expect to meet with equally good results in every case of typhoid, he thinks that the ammonium salicylate will prove a valuable agent in typhoid fever.

In six cases of facial erysipelas he has used it with very gratifying results. The temperature was invariably reduced by its administration, and the course of the disease so modified that its benefical effects were quite evident. In all these cases the disease subsided in from four to seven days. Among other cases in which he has employed it was one of septic cellulitis of the arm, with profound constitutional disturbance. The patient was a butcher of robust

physique, 49 years of age. The trouble originated from a slight wound on the posterior aspect of the ring finger of the left arm, and about a week after it was received he noticed a painful sensation in the arm, for which he consulted DR. SULLIVAN. On the ulnar surface of the forearm there was found a subcutaneous circumscribed swelling, quite tender on pressure, but free from redness or any discoloration Soon after leaving the doctor's office he was seized with a violent chill, which continued for nearly an hour, and was followed by high fever, with extreme restlessness and anxiety of mind. During the next twenty-four hours his temperature ranged from 104° to 105°, although he was cinchonized with quinine, which was administered freely with small doses of morphia. In the meantime the swelling in the arm had extended very much and assumed an erysipelatous appearance. He now became quite delirious, vomiting set in, and the case assumed a very serious aspect. Under these circumstances the use of quinine was suspended, and salicylate of ammonium was ordered in 8-grain doses every two hours. After the fourth dose a copious perspiration was induced and the temperature fell to 102°, and he became comparatively comfortable. In consequence of the improved condition the remedy was now given less frequently, but he still continued to take it regularly, and under its use the case progressed almost uninterruptedly toward recovery.

DR. SULLIVAN also refers to the use of the remedy, with illustrative cases, in puerperal septicæmia, the third stage of phthisis, diphtheria, dyspepsia with fermentation, infantile diarrhœa and croupous pneumonia; and draws the following conclusions:

Ammonium salicylate is certainly a very effective antipyretic. It will not reduce temperature as rapidly as antipyrin or antifebrin, but the antipyretic effect is more lasting than that produced by either of these agents.

In certain diseases of septic origin it exerts a curative action by tending to retard, and possibly inhibit, the development of septic elements in the system.

I cannot agree with DR. BARNETT that it is stimulating. From my own experience I am inclined to believe that in large doses, or in moderate doses continued for a long time, it has a decidedly depressing effect upon the heart and respiration; but this depression may be obviated by administering it in combination with the aromatic spirits of ammonia.

It has an irritating action upon the kidneys, and consequently should not be given in scarlet fever, or in any case in which these organs are not in a healthy condition.

It has been my custom to prescribe it in from gr. viij–x doses every two to four hours during the first day, then at longer intervals as the requirements of the case may indicate. In some cases ʒ ss given in divided doses during twenty-four hours will produce decided ringing in the ears; others will take ʒ j in the same time with but little disturbance. To children of about 3 years of age I usually administer it in gr. iij doses every four hours.—*Journal of American Medical Association*, Aug. 6, 1887.

PERNICIOUS ANÆMIA.—At the last Kongress für innere Medicin, LIGHTHEIM gave his experience concerning the dependence of pernicious anæmia upon the presence of the bothriocephalus latus in the intestinal canal. In the course of the last year he had observed two cases, of which the first presented itself before the publication of REYHER'S interesting communication upon the same subject in the Deutsches Archiv für klin. Medicin, Bd. xxxix. In the first case, on account of the extreme weakness of the patient, no attempt was made to expel the parasite, or rather parasites, for on post-mortem six bothriocephali were found in the intestinal canal. In the second case the parasite was expelled without perceptible effect upon the course of the disease. LICHTHEIM has seen nine other cases of pernicious anæmia in which no parasite of any kind was found in the digestive tract. He concludes, therefore, that the *rôle* of the bothriocephalus in the production of pernicious anæmia is a modest one, but admits that, clinically and anatomically, it is impossible to distinguish the cases in which the bothriocephalus is present from those in which it is absent.

The same observer also directs attention to the presence of degeneration of the posterior columns of the spinal cord in certain cases of pernicious anæmia. He has observed two such cases in which the diagnosis of tabes was confirmed by the necropsy, and a third in which, although the clinical evidence was not altogether complete, and there was no post-mortem examination, there was reason to suspect the the presence of tabes. The affection of the cord is regarded as secondary to the anæmic condition, because the symptoms of the former either follow or are synchronous with those of the latter, and, in addition, the anatomical changes are those of an acute process. This is true also of the symptoms, which manifest themselves in the upper extremity much earlier than in ordinary takes.

LICHTHEIM closes his communication with a consideration of the curative value of transfusion of salt solution in pernicious anæmia. He had become convinced that this measure was deleterious, both to the patient and the blood, and had abandoned it, but was induced to resume it by the favorable report of a case by LEPINE, with the result of strengthening his former convictions. Of five cases in which he had lately employed it, two died a few days after the opertion; two recovered from the operation, their blood condition remaining the same as before; the fifth was not unfavorably affected by the transfusion, soon after which the condition of the blood decidedly improved. The conclusion was that in anæmia of high grade and acute course, transfusion of normal saline solution is contraindicated; while in more chronic cases of lower grade, it may, perhaps, be of benefit.

In the discussion upon LICHTHEIM'S report, JURGENSEN referred to a case of profound anæmia in which, the possibility of infection with anchylostomum duodenale not being entirely excluded, he administered extract of male fern. A careful examination of the stools demonstrated the absence of anchylostomum, but showed enormous quantities of bacterium termo—the ordinary bacteria of putrefaction. Immediately after this expulsion improvement set in and proceeded to complete recovery.

LITTEN states that in fourteen cases he had examined the blood and feces without finding

any of the parasites described by other observers of this disease. He believes that there are cases of pernicious anaæmia for which, as yet, no sufficient cause has been discovered, while there are others, resembling the former in their finest details, which are fully explained by the presence of cancer, by changes in the gastric and intestinal mucosa, etc. This is certainly the most reasonable view of the obscure question, although there appear to be no good grounds for separating the pure cases of pernicious anæmia—*i. e.*, those of which the cause is unknown, from those of which the cause is known. The question is one of blood changes, and they are the same in both. A blood containing megalocytes, poikilocytes, and mycrocytes is the blood of pernicious anæmia. This condition may be secondary—*i. e.*, the cause is known; or primary—*i. e.*, the cause is, as yet, unknown.—*Med. News.*

Salix Nigra as a Sexual Sedative.—J. Hutchison, M. D., in the British Medical Journal, says:

In many women pain in the ovarian region is a constant attendant upon the menstrual epoch. In some this is due to organic disease, but in a large number it is one of the manifestations of the neurotic temperament. Such cases are met with in all degrees of severity, from a slight amount of discomfort along with indications of globus hystericus, up to hystero-epilepsy in its most pronounced forms.

It has always been a slur upon our profession that when a method of treatment becomes popular or fashionable other methods are entirely discarded. At present, massage and isolation from relatives is the popular mode of treatment, and drugs occupy a secondary place, if, indeed, they have any place at all. Pecuniary difficulties, however, stand in the way of isolation or massage ever reaching the masses, and drugs will always be in employment. Several drugs are in daily use against the ailment, but with only partial success, and it is with the view of bringing before the profession a remedy which in my hands has produced results which I never had before while I was employing the bromides, valerian, assafœtida, etc., that I have sent this short notice.

Salix nigra, or the pussy willow, is a tree growing from fifteen to twenty feet high. It is met with along the streams in the Southern States of America, and is credited with possessing tonic, carminative, and stimulant properties, besides being an astringent and antiperiodic. In the Transactions of the Texas State Medical Association, Mr. Pain reports many cases treated successfully with the drug. He prescribed it in cases of ovarian hyperæsthesia, uterine neuralgia, etc., and also in spermatorrhœa and nocturnal pollution. His verdict upon the drug is that it is a powerful sexual sedative, similar in its action to bromide, but without its depressing qualities.

Through Messrs. Thomas Christy & Co., of London, I obtained a supply of the fluid extract, and have been employing it for some months. The most numerous class of cases in which I exhibited the drug were women of a nervous temperament, in whom the nervous irritability reaches its height at the menstrual period, when, along with the general malaise, is added a very decided pain in one or other ovary. They also suffered from hemicrania, the pain being situated above the left eyebrow, and resembling the feeling as if a nail were being driven into the scull (clavus). Many of them, too, complained of a pain underneath the left breast, and extending around to the back. On one or two occasions I have noticed plaining of the above symptoms, and in only a moderated degree, under favorable conditions—as, for example, long-continued anxiety or alcoholism—go from bad to worse till they became hystero-epileptics. In cases of this kind, it is supposed that the centre of inhibition has in some way got out of gear, and in the severity of the symptoms depends upon the amount of disturbance in this nerve-centre.

In cases where the ovarian distress was the symptom for which advice was sought, as being in the patient's eyes the most prominent, I usually succeeded in eliciting other indications of an irritable nervous system, and placed them upon half-drachm doses of the fluid extract of salix nigra three times a day. In quite 75 per cent. of patients so treated a great amount of relief was obtained after two or three days' treatment. Not only was the ovarian hyperæsthesia relieved, but the nervous palpitation of the heart was abated, and the patient felt in every way stronger

I have also given the drug in two cases of nocturnal emissions with marked benefit. The pollution ceased entirely while the drug was being taken and for several months thereafter. Virile power and passion were not much if at all diminished, but the relief from the ailment gave them great satisfaction.

Treatment of Anal Fissures and Hemorrhoids by Gradual Dilatation.—H. O. Walker, M. D., in a paper published in the New York Medical Journal, July 30, 1887, presents five cases of anal fissure and hemorrhoids as illustrating upwards of fifty he has treated by gradual dilatation. We reproduce Dr. Walker's conclusions omitting the history of the cases:

Anal fissure, or irritable ulcer, according to statistics, ranks third in frequency among the diseases of the rectum, is found in the infant as well as in the octogenarian, and is due principally to the passage of hardened fæces through the sphincters. Although insignificant in character, it causes fully as much exquisite agony as any ill that human flesh is heir to. Very many simple fissures get well promptly, but where, by frequent mechanical irritation, they come to stay, it is then that beneficial treatment is desirable, and it is for this reason that I offer a report of a few cases treated by a method which is both simple and efficacious.

These reports are taken from a record of upward of fifty cases that I have treated by this method, and are fair representatives of the character and results of the whole. I am firmly of the opinion that this treatment is equally applicable in hemorrhoids and constipation as in the treatment of fissure, as has been illustrated in these and other cases that have come under my observation.

Monod and Verneuil both speak of a "New Treatment of Strangulated Hemorrhoids" by forcible dilatation Verneuil recommend-

ing it for simple piles, while MONOD goes still further by forcibly dilating the sphincters while the hemorrhoids are in a state of painful strangulation, using his fingers instead of a speculum.

KELSEY, in his resent work on "Diseases of the Rectum and Anus," in speaking of the treatment of hemorrhoids by ligature, says that "the sphincter should be carefully dilated first, and this is a step of great practical importance, as the securing of complete paralysis of the muscle will do more than anything else to prevent pain and spasm after the operation. When this is omitted as unnecessary by the surgeon, I have observed a week of great suffering to the patient follow the omission." He however, does not speak of this as a treatment for hemorrhoids. ALLINGHAM mentions forcible dilatation as one of the measures for relief of hemorrhoids, but does not regard it as available in all cases. Gradual dilatation is not spoken of, as far as I know, by any writer, as a means of cure in these cases.

Forcible dilatation is the accepted method for the relief of fissure in ano, and in most cases gives very speedy results.

In conclusion, the treatment of anal fissure and hemorrhoids by gradual dilatation:

1. Is almost painless, at least after the first two or three distensions.
2. It does not tear the parts; nor does it produce paresis, as occasionally occurs after forcible dilatation.
4. Neither does it leave cicatrices that are apt to produce stricture, as in the method of hypodermic injection or ligature of hemorrhoids.

ANTIPYRIN AND ANTIFEBRIN AS ANALGESICS.—M. GERMAIN SÉE, in a paper read before the French Academy of Sciences, reports remarkable results from the use of antipyrin as an analgesic. He has used it in subacute rheumatism, and acute gout both primary and secondary to chronic gout with chalky deposits. Antipyrin, in doses of a drachm to a drachm and a half, removed both pain and swelling in from two to four days, without any bad effect upon heart or kidneys. Moreover, he has used it with particular success in neuralgia and migraine, in sciatica, diabetic neuritis, zona, and locomotor ataxia. Confirmation of these good results is beginning to come in from other competent observers. More recently, DR. H. M. FISHER reports a case in which he obtained a very happy result from the use of antifebrine in spinal syphilis. A noteworthy fact in these cases is that the pain does not always recur, and when it does is not so severe.

In recording the similar results produced by antipyrin and antifebrin, one is forcibly reminded of the studies of BLAKE, in which he has shown that, with some exceptions, metals which form isomorphous salts have the same physiological action, and that the physiological power increases with the atomic weight of the members of these isomorphous groups. Most of the new antipyretics (kairin antipyrin, thallin, antifebrine, antithermin, etc.) are isomorphous, crystallizing in rhombic prisms. Again, LAUDER BRUNTON and CASH have found that in most of the cases in which a union is made between the amidogen and the methyl radicles in the alkaloids, there is a paralyzing action, and this action is said to be greater with than without the methyl radicale in connection with the amidogen in the alkaloid.

These new drugs are synthetic compounds. It would almost seem, therefore, that the science of chemistry is rapidly approaching such a state of perfection that it soon may be able to produce any drug as soon as the therapeutist had indicated what physiological action was desired.—*Med. and Surg. Reporter*, Aug. 6, 1887.

THE THERAPEUTIC VALUE OF THE PERMANENT BATH.—Since the brief note we published last week upon the alleged value of continued immersion in a bath for the relief of dropsy, we have seen a paper by DR. JAMES BARR, which will appear in the forthcoming issue of the Liverpool Medico-Chirugical Journal. DR BARR gives details of the case of a girl, eighteen years of age, who was in a most critical condition from pyæmia, acute periostitis of the left femur, acute arthritis of the left hip and knee joints, and extensive bedsores. It was decided as a last resource to immerse the patient in a boracic bath at a temperature of about 95°F. For seventeen weeks she was thus kept continuously immersed, with the most satisfactory results. DR. BARR appends a case of pyæmia treated for four months in a bath by MR. CHAUNCEY PUZEY some years ago. It is evident that the practice is one which might well be more widely adopted, and there does not appear to be any serious difficulty in carrying it out. As DR. BARR points out, it was a plan long since advocated by HEBRA in cases of extensive burns and widespread dermatitis, and at Vienna bath-rooms specially adapted for the purpose are fitted up; but in this country it has been but seldom resorted to, one instance which occurs to us being a case of acute pemphigus, which DR. SOUTHEY brought before the Clinical Society five or six years ago. DR. BARR'S paper is additionally interesting from the description he appends of the "hydrostatic bath" introduced by DR. NEILL ARNOTT, which consists in supporting the patient (without total immersion) in a bath of water of sufficient depth to permit of it The description is given in the first edition of DR. ARNOTT'S famous work on the "Elements of Physics," and it is to be regretted that in the later editions this description should have been curtailed by the editors. The ordinary form of water-bed, although involving less management, is certainly not so well designed for the purpose in view as this very ingenious plan of DR. ARNOTT'S.—*Lancet*, July 30th, 1887.

A SIMPLE WAY TO APPLY FLUIDS TO THE NASAL CAVITY.—In practice it is sometimes far from easy to make application of fluids to the inside of the nose and the posterior nares. Douches are not quite safe, because the fluids are sometimes forced into the Eustachian tube, and set up an inflammation of the middle ear. On the other hand, it is very hard to teach patients how to draw a fluid up into the nose without producing strangling or coughing.

A way which I have found very successful is the following: Take a test tube about four inches long and half an inch wide, and place in it the solution to be used. Open the mouth and breathe through it. Put the open end of the tube into the nostril, catching the rim against the ala so as to make a good fit. Then bend the head back, and raise the closed end of the tube, so as to *pour* the fluid into the nostril. All the while keep breathing through the mouth. The fluid will now run into the nose, pass back to the naso-pharynx, and can be made to go around behind the septum and on top of the soft palate, and come out of the opposite nostril. By moving the head about in various directions, the fluid can be made to reach any point in the nares, in front or behind, and to remain in contact with it as long as may be desired.

Any one who will try it will be surprised to find how thoroughly and easily this can be done.

Of course, all fluid applications to the nares must be well warmed and of a proper specific gravity. If, for example, Dobell's solution be warmed to about 100° (Fahr.), and used in this way, it will be found a most soothing application. The quantity to be used may easily be as much as such a test tube as I have referred to will contain. And it may be filled several times and used again and again at a single sitting.

The method just described may not be new to others, but it is new to me; and I publish it for the benefit of those who are not acquainted with it.—CHARLES W. DULLES, M. D., in *Med. and Surg. Reporter*, Aug. 6, 1887.

OXYGEN BATHS IN FEBRILE CONDITIONS.—A Spanish observer, DR. F. VALENZUELA, starting from M. PAUL BERT'S results showing the destructive action exerted by oxygen of high tension on vegetable and micro-organic life, has recently made a number of interesting observations on the power of an atmosphere of pure oxygen to affect the febrile state. He found that the temperature of healthy rabbits, after being kept for an hour in pure oxygen, at pressures of from 760 millimètres to 1,520 millimètres, underwent a marked diminution, amounting in the last case to as much as 11°F. Again, rabbits into which septic matter had been injected so as to induce pyrexia, suffered a decided diminution of the fever by immersion for one or two hours in an atmosphere of pure oxygen. In one experiment, where two rabbits were similarly injected, one, which was twice bathed in oxygen at a tension seven times as high as that which it has in the atmosphere recovered, while the other, which was left untreated, died on the third day. Several observations were also made on hospital patients. Two cases of acute pneumonia, treated with oxygen "baths" at a pressure of 960 millimétres, ran a peculiarly rapid and favorable course. In a phthisical case with a temperature of 103.6° F. an oxygen "bath" brought the thermometer down to 101.3°. The next evening the temperature rose as before, and was again reduced in the same manner; slight hæmoptysis, however, was caused by the "bath." The next day there was no rise of temperature. After two days, a third "bath" was given, and from that time the febrile condition appeared to improve, for though the temperature sometimes rose above normal, the pyrexia was never so pronounced as it had been. From a second case of the same kind reported, there would seem to be a decided danger of these oxygen "baths" producing hæmoptysis. On the temperature however, they appear to exert a very beneficial effect.—*Brit. Med. Jour.*

HINTS IN PEPTONIZING MILK.—DR. BURROWS advises as follows in the London Record of May 16, 1887: As to the addition of water in the peptonizing process, adding water reduces the quantity of casein in cows' milk to that of mothers' milk; and besides this, serves an important office, in that it prevents the action of the milk curdling ferment. If water be not added, the rennet ferment present would curdle the milk, and then subsequently digest the curd. But in this case milk may be peptonized too much, and a bitter taste will be present.

Soda.—As to the addition of sodium bicarbonate, besides imparting to cows' milk the slight alkalinity natural to mother's milk, it affords the pancreative digestive ferments a fluid resembling in reaction that in which they are normally active. It also prevents the milk, if not fully peptonized, from curdling when boiled, for alkali-albumins are not precipitated by heat.

Cold and Boiling.—It should be stated that in predigesting milk boiling is advantageously resorted to when a discontinuance of the process is desired. If a peptonizing powder be added to a pint of milk, with a quarter or half a pint of water, and the whole allowed to stand in a small pail of water as hot as the hand can bear, at the expiration of from twenty to thirty minutes the milk will be peptonized sufficiently. If the milk be not then set on ice or boiled, peptonization will continue slowly, and the casein finally be wholly digested. If cows' milk be boiled, at the expiration of, say twenty or thirty minutes of peptonization, the casein will assume, on the addition of acid, a flocculent, flaky character, not unlike mothers' milk. Boiling destroys all digestive ferments. From all that one can judge, the results obtained with peptonized milk are of a satisfactory nature.—*Med. News.*

A NEW TREATMENT FOR ERYSIPELAS.—PROF. V. NUSSBAUM has frequently treated erysipelas in the following manner: In case of solution of continuity on an erysipelatous surface, he would first, after carefully disinfecting the wound, cover it with small iodoform gauze compresses: then cover the whole surface, where the erysipelatous inflammation was on the increase, with ichthyol salve, consisting of equal parts of ichthyol and vaseline. This he then covered with salicylated cotton and applied a loose bandage. The following day he found that not only did the erysipelas extend no farther, but the surface already involved had improved in appearance. The pain which had existed the day before upon touching, had entirely disappeared, instead of which a slight

numbness of the parts was experienced. In fact all inflammatory symptoms had disappeared, nor did they return, although the application was repeated but three times. A further continuation of the treatment would not have been advisable, as the ichthyol was beginning to affect the skin disagreeably. Nussbaum applied this treatment in five cases of erysipelas of the extremities with surprisingly good results. In cases of facial erysipelas he considers an ichthyol collodium more applicable, and where the scalp is affected, he advises the use of ichthyol soap, although he has himself not as yet had an opportunity of testing its merit. In regard to the healing properties of ichthyol; it would be well to add that it possesses no antiseptic qualities, and therefore could not destroy the micrococci of erysipelas. Nussbaum supposes on this account that the alterative effect of the agent so reduces the soil of the cocci that it becomes unfit for their further development upon it.—*Weekly Med. Review.*

Biborate of Ammonium for Uric-acid Calculi.—Says Wm. J. Crittenden, M. D., in Va. Med. Monthly, the treatment of a paroxysm of "renal colic" need not be recapitulated. But the *prevention* of these attacks has puzzled the master minds. In patients who have these attacks of renal colic every day, I prescribe twenty-grain doses of ammonium biborate every two hours until a free passage of urine takes place; then every four hours until all ill-feeling passes away; then I decrease to fifteen-grain doses three times a day, before meals, in a glass of flaxseed tea, and so continue sor several months—discontinuing it for a day or two at a time every two weeks. In cases in which the paroxysms recur once a week, I pursue the same plan of treatment.

If these paroxysms recur once a month, I give fifteen grains before each meal for two or three months at a time. I find it a good plan, when we give it for a length of time, to combine with it *lithiated extract hydrangea* in teaspoonful doses.

℞ Bi-borate of ammonium, ʒ j,
Water, Oj.
M. S. Take one tablespoonfull before each meal

℞ Bi-borate of ammonium, ʒ v,
Lithiated ext. hydrangea, ʒ iv.
M S. Take one teaspoonful just before each meal in flaxseed tea.

I always find the solution to be best when made fresh.

Coca Cigarettes.—Dr. Nachtigal of Stuttgart, in the Pharmaceutische Centralhalle, refers to the excellent qualities of coca, especially of the wine of coca, in appeasing hunger and as a stimulating and animating article of consumption in forced marches or other exhausting toils, and then recommends an entirely new product of the coca industry—the coca cigarettes—to general attention. He writes: "The extremely mild taste and odor is to be commended. After I had tested them on myself and on reliable acquaintances, I gave them to asthmatic patients, later in catarrhal affections of the organs of breathing, and finally in migraine, even of the nervous type. I am of the opinion that the uniformly favorable results thus observed, are to be ascribed to the moderate anæsthetic action of the coca smoke upon the nerves of the mucous membrane with which it comes in contact. No ill effects were at any time noticeable, so that even the "non-smoker," or those who cannot bear the ordinary tobacco containing nicotine on account of weak stomach, may smoke the coca tobacco with impunity. I am convinced that this latest asthma-cigar will soon and permanently supersede those hitherto used and made from hyoscyamus, stramonium, belladonna, etc., and I can only warmly recommend an experiment therewith. I believe, however, that the coca tobacco will find more and more favor not only with the sick, but also with the healthy, and will justly soon assume a prominent position in the rank of luxuries.

The Treatment of Hæmoptysis.—From an extensive article by Barie, in the Revue Générale de Clinique et de Therapeutique of June 16, 1887, we take the following useful formulæ:

Tannin is a remedy most frequently used; its dose is from 9 to 15 grains; or by tablespoonful doses of the following:

℞ Tannin, gr. 8 to gr. 15.
Tinct. cinnamon., ♏ 30.
Syrup. simp., ʒ 7½.
Aquæ aurant. fl., ʒ 5.
Aquæ, ʒ 25.

If gallic acid be preferred to tannin, it may be combined with ergotin as follows:

℞ Acid. gallic., gr. 30.
Ergotin, gr. 15.
Glycerin., gtt. 5.
Syrup q. s.
Make 20 pills.

Five pills should be taken daily. In cases where the use of krameria or ratanha with ergot and digitalis is indicated, the following will be found useful:

℞ Ext. ratanhiæ, ʒ 1.
Ergot., gr. 45.
Digitalis pulv., gr. 8.

To be made into 40 pills, of which six may be taken daily.

A Case of Tetanus Cured by Hypodermic Injections of Cocaine.—Dr. M. Lopez reports the following case in El Genio Medico-Quirurgico for February 7, 1887: M. G., 50, laborer, after working in the wet and cold, complained of rheumatic pains of back and limbs. Three days later, he had marked opisthotonos and painful cramps, and all the symptoms of idiopathic tetanus. Chloral hydrate and morphine were prescribed. For three days

the patient was kept under the influence of these drugs, with the result that the pain was lessened, but the muscular rigidity and cramps increased. He now became unable to swallow, and death seemed imminent. Morphine was injected hypodermically, but was followed by no amelioration of the symptoms. Three syringefuls of the mixed solutions of morphine and cocaine (each five per-cent.) were then injected. The effect was immediate. After two hours, he could move the limbs, turn in bed, and open his mouth. On the next day he was going on well; slight trismus and stiffness of the neck remained. On both sides of the neck, and at the angle of the jaw, a fourth part of the syringeful of the same solution was injected. On the next day, all the symptoms had disappeared. The patient rapidly regained strength, and in a week's time returned to work.—*London Medical Record.*

Sparteine, a Heart Stimulant.—Langgaard reports the following formulæ, which he found useful in eighteen cases of heart disease:

℞ Spartëin. sulph., gr. 6.
Pulv. rad. liquirit.,
Succ. liquiritæ, ää q. s.
Ft. pil. 20 in num.
Sig.—One or two pills from two to four times daily.

Also

℞ Spartëin. sulph., gr. 3 to gr. 7.
Aq. destill., ʒ 2½.
Solv.
Sig.—Twenty drops, from two to four times daily in, sweetened water or wine.

℞ Spartëin. sulph., gr. 3 to gr. 7.
Syr. aurant. cort., ʒ 12½.
Solv.
Sig.—A small teaspoonful in water, from two to four times daily.—*Therapeutische Monatshefte*, June, 1887.

Asthma Therapeutics.—Lazarus, of Berlin, is quoted as follows by the Journal of Laryngology for May, 1887:

1. The prophylaxis of bronchial asthma requires a report of the hereditary and constitutional conditions present, and especially of the condition of the mucous membrane of the nose and throat.

2. The asthmatic attack must be suppressed as soon as possible. The best medicament for this purpose is iodide of potassium and chloral. In special cases operative treatment of the nose and naso-pharynx is recommended.

3. The treatment of the secondary affections is the more important in that they may become causes of recurrence of the asthma. For these conditions the best treatment is the pneumatic chamber. In chronic catarrhal conditions of the bronchi the best treatment is turpentine and iodide of potassium.

The Treatment of Nasal Diphtheria.—Mygind (Jour. of Laryngol. and Rhinol.; Bristol Med.-chir. Jour) quotes Reierson as believing that the pituitary membrane forms a nidus for micrococci more readily than almost any other mucous membrane, and as suggesting, in view of the unsatisfactory results of antiseptic injections and attempts to remove the false membrane with a forceps, the insertion of bougies containing:

Cocaine hydrocloride, ⅕ grain.
Boric acid, 15 grains.
Starch,
Gum arabic, each 1½ grains.
Glycerin, a sufficient quantity.

The amounts of the active ingredients may be reduced in the case of children. A bougie is to be passed into each nostril, and pushed along until it reaches the naso-pharynx. They melt in an hour, and others may then be inserted if relief does not occur after syringing the nostrils.—*N. Y. Med. Journal*, July 30, 1887.

A New Hypnotic.—At a recent meeting of the Society of Neurologists and Alienists of Southwestern Germany, held at Strassburg, von Mering reported his use of amylen-hydrat, or tertiary-amyl-alcohol, in 60 cases. The drug was administered 250 times to patients suffering from mental and nervous disorders. Its dose ranges from 30 to 75 minims; sleep so produced lasted from six to eight hours, and no ill after-effects followed. Its taste is more agreeable than that of paraldehyde. It was given in the following mixture, which was well shaken before taken:

Amylen hydrat., ʒ 1.
Aq. dest., ʒ 10.
Ext. liquritiæ, ʒ 1.

—*Duetsche Medicinische Wochenschrift*, June 23, 1887.

Dry Hot-Air Baths for Syphilitic Patients.—Dr. Stepanoff, of Moscow, has contrived a plan of treating patients suffering from syphilis which has resisted mercurial and iodine treatment. He has had a box or bath constructed with an iron bottom lined with thick felt, in which the patient is placed. The bath is heated to about 170° to 190° F. by means of two Bunsen's lamps, each consisting of five burners. After the patient has been "baked" he is put to bed and covered with blankets, so as to prolong the sweating process commenced in the bath for an extra half hour. After this he is allowed to dress and go into the ward to his dinner. By means of these baths the mercury is rapidly eliminated from the system and the patient's condition greatly improves, and after a course mercury is found to act quickly and energetically.—*Lancet.*

The Medical Age.

Vol. V. DETROIT, SEPT. 10, 1887. No. 17.

Original Articles.

ABDOMINAL SURGERY AND HOW TO LEARN IT.

BY HAL C. WYMAN, M. D., DETROIT, MICH.

(*Continued from page* 364.)

CHOLECYSTOTOMY.

There are two methods of performing cholecystotomy, one of these consists in dividing the operation into two parts, viz.: the abdominal wound and stitching the gall bladder to the parietes of the abdomen, and waiting until the edges have grown fast before opening the viscus.

The other method consists in stitching the gall bladder to the wound in the abdominal parieties directly it is reached.

In making the operation upon men, an incision from three to four inches long is made in the epigastrium, either in the linea alba or along the outer border of the right rectus muscle.

All bleeding should be stopped before opening the peritoneum.

When the gall bladder is exposed, its fluid contents should be removed by the aspirator, and afterwards the fundus incised so as to permit of digital examination of its interior.

Care should be taken to hold the gall bladder well up into the wound so that nothing may escape into the peritoneal cavity. After the calculi have been removed, the edges of the gall bladder should be stitched with continued sutures according to TAIT, or with several interrupted sutures, to the edge of the abdominal wound, leaving the opening into the gall bladder quite free.

Finally, the rest of the abdominal wound should be closed in the usual way.

Great care should be taken to pass the sutures through the whole thickness of the parietes, including the peritoneum.

There are several other points requiring caution in this operation, namely: 1st. No part of the wall of the gall bladder should be cut away. The walls may be very vascular, and much hemorrhage has been known to follow their removal. 2d. If stones are found in the neck of the gall bladder, or are encysted in its walls, much care must be exercised in the attempt to remove them, or the walls may be perforated, allowing the bile to escape into the peritoneum. 3d. If the calculus has adhered to the mucus membrane of the gall bladder, it will be better to leave it behind than to run the risk of killing the patient by tearing the walls of the gall bladder.

No attempt should be made to close the incision in the gall bladder so as to return the viscus to the abdomen, owing to the possibility that bile may escape through the stitches into peritoneal cavity.

But granting that this risk is very remote, there is still danger and a more forcible objection; it is that the surgeon cannot be sure that a calculus has not formed in some part of the common or cystic duct, beyond reach of forceps or his fingers.

It is best to provide a cystic opening, through which all bile or calculi which are not detected, or which cannot be removed at the time of the operation, may subsequently come away.

Such in substance are the words of a writer in the Encyclopædia of Medicine and Surgery, by ASHURST.

Physiologists, long before surgeons assailed the gall bladder, were accustomed to cut down upon this organ, and after incising it stitched it to the margins of the wound, passing a ligature about the common duct and establishing a genuine biliary fistula for the purpose of studying the value of bile in the animal economy.

Their work was done upon dogs and rabbits, although dogs made the best subjects, owing to the fact that the gall bladder in them is larger.

To carry out in this animal the general plan of cholecystotomy as it is performed in man, make an incision in the abdomen, parallel with the external border of the rectus muscle, and nearly opposite the umbilicus.

This incision should vary in length from an inch and one-half to three inches, according to the size of the animal. Pushing aside the omentum, the gall-bladder will usually be found as a small greenish looking cyst adherent in the bottom of the wound. It can easily be drawn into the abdominal wound, and its contents removed by aspiration, when a small opening can be made through it with a knife or scissors. It can be attached to the margin of the wound by interrupted or by continued sutures, as the operator thinks best.

In some instances the external incision in the

abdominal wall may be so long that if the gall bladder is sutured to the lower angle of the wound the tension will be too great upon the sutures to permit of proper union. In that event it is best to close up part of the abdominal wound by interrupted sutures until that portion of it is reached where the gall bladder can be sutured into it without undue traction.

Before this measure can be performed successfully—that is the animal making a good recovery—several dogs will be sacrificed while the operator is learning to do the work.

So sensitive is the peritoneal cavity to the smallest quantity of bile that a fatal peritonitis very easily develops.

My friend DR. J. E. CLARK, of this city, has related to me the case of a robust workman who, while engaged in lifting some heavy object, suddenly felt something give way in the right side of the abdomen in the region of the gall-bladder. He immediately suffered pain, which gradually became more and more intense, and which speedily led to collapse, and after twelve hours death.

On opening the peritoneal cavity the doctor found the patient had sustained a rupture of the gall-bladder, and through the small rent a considerable quantity of bile had escaped into the peritoneal cavity, causing death as before mentioned.

CHOLECYSTECTOMY.

The walls of the bladder may be so diseased or so injured in the course of a surgical operation that the danger of hemorrhage or sepsis makes the retention of the organ in the peritoneal cavity unsafe. Sometimes the parieties of the gall bladder may contain a number of encysted stones which threaten perforation, and which can not be removed without jeopardizing the integrity of the gall bladder walls. In such a case, the gall bladder should be removed entire.

This is done by pushing aside the large intestine, bringing the liver and the diseased gall bladder into the wound, and putting a ligature around the cystic duct, and then dividing it with a few strokes of the knife or scissors, taking care not to wound the liver when detaching the gall bladder from its natural adhesion to that organ.

For this purpose, upon dogs, you make the incision in the abdominal wall, precisely as for cholecystotomy. But the technical training consists mainly in the separation of the gall bladder from the liver, so in the dog you draw the liver upwards, and its free edge into the wound so as to make the whole gall bladder and cystic duct as available as possible. Then with thumb and finger grasping the liver with one hand, and the gall bladder with the other, the latter is separated from the former.

If the peritoneum, where it reflects from the gall bladder to the liver is carefully divided very little hemorrhage follows, the process of stripping the gall bladder away from the liver. A ligature is now passed and tied around the cystic duct and the gall bladder removed. The purpose of the ligature is to prevent a reflux of bile from the hepatic duct into the cystic duct and thence into the peritoneal cavity. In numbers of operations of this kind upon dogs the writer has known the liver to be extensively wounded and its capsule of Glison sutured and yet healing process suffers no interruption.

CYSTOTOMY AND BLADDER WOUNDS.

Sometimes in the course of operations for the removal of tumors from the cavity of the abdomen, the bladder is found adherent to the tumor in such a way, that it is either torn accidently, or its incision becomes necessary.

Such wounds should always be closed by suture; and important lessons may be learned by making such wounds in the bladders of brutes lower in the scale of animal life than a man.

I have repeatedly made wounds in this organ by thrusting a knife through the front wall of the abdomen just above the symphysis pubis. the bladder having been previously distended by injection, by means of syringe with a quantity of warm water.

In a medium sized dog, say thirty pounds weight, the bladder will be found at a depth from the front wall of the abdomen of not more than one inch, and such a wound will not be likely to injure any other organ than the bladder.

It will permit the escape of the fluid contents of the bladder into the peritoneal cavity and the effects of the presence of urine in this cavity may be easily studied.

I have closed these wounds with every variety of suture, but that which has given the most satisfactory results, has been the suture of LEMBERT. It carefully approximates the two surfaces of the peritoneum and leaves the cut edges of the wound to discharge their fluids into the bladder to be carried away with the flow of urine.

Rupture of the bladder from external causes, is quite a rare occurrence. I have attempted to produce it upon the lower animals but without success. I have however succeeded in causing this viscus to give way, by injecting through the urethra into the bladder, a quantity of water, which was further compressed until the walls of the bladder yielded by means of a strong piston.

In every instance, I found it necessary before the bladder could be broken down, to fasten the urethra to the nozzle of the syringe, else that canal would yield and the fluid escape by the side of the nozzle, before sufficient

pressure could be brought ta bear upon the vesical wall to compel it to give way.

I have also distended the bladder to its utmost degree and then by the application of blows and pressure through the abdomen, by the exhibition of emetics to further force violent contractions of the abdominal muscles, and have given hypodermatic injection of strychnine with the view of inducing a tetanic spasm of the muscular system, all these in the expectation of producing a rupture of the bladder, but without success.

Yet the history of this accident as commonly recorded in the various works upon surgery, places doubt in regard to its occurrence entirely out of the question.

In cases in which the surgeon has reason to think, as a result of his manipulations with the catheter, lithotrite or other instrument, that the bladder has ruptured and its contents escaped into the cavity of the peritoneum, his duty is to open the abdominal cavity, by a section in the median line, from the umbilicus downward until the bladder is exposed through the wound.

The bladder should be thoroughly examined and the rent sought out and closed by interrupted sutures.

In the high operation for the removal of stone from the bladder, should the peritoneal cavity be accidentally opened and urine escape into it, the operator should enlarge the opening into the peritoneal cavity or by other means, be sure that it has been perfectly drained.

CYSTECTOMY.

Cystectomy—extirpation of the bladder. This operation has hardly established its legitimacy. Italian surgeons are just beginning to think and speak of it. It can be made upon dogs with quite uniform success. My method is this: Open the abdomen from the umbilicus to the symphysis pubis. Empty the bladder by pressure. Pull the intestine out of the pelvis and find the ureters. Divide them after they have disappeared in the retrovesical fold of the peritoneum. Continue the dissection through this fold until the rectum is perforated at a point where it will most easily receive the proximal ends of the ureters. Fasten them in the rectum by fine silk or cat gut sutures.

The bladder may now be removed by carrying an incision around it, near enough to its apex, and through the peritoneum only, so that membrane may be closed by sutures after the enucleation has been completed.

A few arteries will require ligature as the tissues about the urethra and base of the bladder are divided. In some dogs I have found it necessary to make a transverse incision through the rectus abdominis and pyramidalis muscles near their insertion into the pubis, at right angles to the primary incision in order to get room to apply ligatures and make incisions for removing the bladder from its attachments to the symphysis pubis and the deep perineal fascias. Were I making the operation on man, I would hesitate to make a large transverse wound in this part of the abdomen. Cancer, however, which could be almost the only excuse for such an operation, requires thorough extirpation, and it is very doubtful if a good thorough operation could be made through an incision in the median line. One will soon learn, after making a few of these operations upon dogs, that the mobility of many organs in the peritoneal cavity is not sufficient to enable one to operate with facility in all cases through a wound in the median line, and to do the work with the best possible chance for success he must often incise the abdominal wall in the region nearest to the diseased or injured viscus.

NORMAL OVARIOTOMY, OOPHORECTOMY.

The study of this operation may easily be pursued on the lower animals, dogs particularly, all that is necessary to perform the operation after the most approved method is to make the section of the abdomen in the median line extending from the umbilicus down to the symphysis pubis. Then, by pushing the finger down into the cavity of the pelvis the uterus is easily felt.

The finger is carried upwards and latterly in either direction along either horn of the uterus until the ovary is found in the iliac fossa. The ovary is now drawn upward through the abdominal wound, a ligature is passed around its attachment to the fallopian tube and broad ligament. With the scissors the ovary may now be excised and the stump or pedicle dropped back into the peritoneal cavity and the abdominal wound closed by interrupted sutures introduced according to the methods heretofore so often described.

This is the common operation of spaying practiced by farriers and swineherds. One of the latter is said by some writers to have been the first ovariotomist. He had become so proficient in extirpating the ovaries of his swine that he had no hesitation in performing the operation upon his daughter, who had grown unmanageable and unwise.

The operation of removal of the Fallopian tubes or the uterine appendages require about the same attention to detail that is required in the operation just described. A study of the influence of ligation of the arteries easily seen to pulsate in the broad ligaments upon the nutrition of the uterus and ovaries has proven very instructive to the writer, and suggests the usefulness of such an operation in cases where complete removal of the diseased structures is impracticable.

HYSTEROTOMY AND HYSTERECTOMY.

These are surgical procedures for incision end excision of the uterus. The influence of such operations on the health of dogs is easily ascertained by experiment, the details of which suggest themselves.

PANCREAS AND LIVER.

Operations on the pancreas and liver have not as yet been brought within the category of surgical procedures.

When the two BELLS had their controversy concerning wounds of the pancreas and their surgical terms in the early part of this century, the attention of the profession was for a time drawn to the possibility and practicability of doing something for the relief of abscess or malignant disease of the pancreas.

The experiments which I have made upon the lower animals, upon these glands have been merely for the purpose of collecting the pancreatic fluid for physiological study.

I have followed the method described by CLAUDE BERNARD in his *Lecons de Physiologie Experimentale.*

In a medium-sized dog an incision is made about midway between the umbilicus and the margin of the ribs, a little to the right of the median line. This is carried down through the abdominal muscles and the abdominal cavity opened.

The duodenum is exposed and by drawing it through the wound the orifice of the pancreatic duct into the duodenum may easily be found; by raising the stomach the mass of pancreas is easily disclosed, and through such a wound, every part of the pancreas is easily accessible. DR. SENN, of Milwaukee, Wis., has made an extensive study of the surgery of the pancreas, making many operations upon dogs.

ON THE LIVER—HEPATOTOMY.

Surgical diseases of this organ are rarely of a character that admits of incision, so that a partial removal of the liver is not likely to do a patient any good.

For the mere purpose of studying the effects of wounds upon this organ, the writer has in animals sometimes opened the front wall of the abdomen of a dog, in the median line, and isolated a portion of the liver with an elastic ligature.

The result of all attempts at removal of a portion of the liver has been fatal.

The artificial production of abscesses by the injection of ammonia and other chemicals into the substance of the liver, has in the hands of the writer invariably proved fatal, although it is a well-known fact that abscesses when developing in this organ in the course of disease, are quite commonly opened by direct incision, and in yet other instances, work their way to the surface and discharge through the wall of the abdomen. No more interesting field exists than the experimental production of diseases of the liver The injection of irritants into the biliary passages, thereby causing inflammation, gives the observer an opportunity to make careful study of the influence of bile in the dog economy.

NEPHRECTOMY.

This is an operation upon the abdomen, although it is not usually upon a portion of the peritoneal cavity, for the removal of the kidneys.

It has numbers of times been successfully performed on man.

The presence of stones, abscesses or cysts in the pelvis, particles or minute portions of gravel may at any time make the removal of the kidney (nephrectomy), or incision in its substance (nephrectomy), a surgical necessity, and our faithful friends, dogs and rabbits, afford excellent opportunity to acquire the manual dexterity necessary for the performance of the operation.

Further. that most frequent disease of the kidneys, Bright's disease, may be studied in all its different phases, by producing it artificially upon these animal.

In man, as in these lower animals, the operation of nephrectomy is usually made through the lumbar region in the posterior wall of the abdomen. The incision is made between the last rib and the crest of the illium parallel with the external border of the quadratus lumborum muscle, resembling the incision that is made in the performance of colotomy.

When this incision is carried downwards a sufficient depth in dogs, the kidney is found in the bottom of the wound.

Through this wound it is withdrawn. A ligature is passed around the renal artery and vein, in fact all the tissues that enter the kidney at the hylum, and by a stroke of the knife the organ is separated.

The constant fatality from disease of the prostate in old men has led the writer to attempt an operation upon the lower animals with the hope of devising a plan by which the urine might be diverted from the bladder, and that organ thus being at rest, facilitate recovery from diseased prostate.

This operation consists in making an incision in both loins of dogs, precisely as for the removal of the kidney exposing the ureters, and then stripping them from their adhesions and dividing them, then fixing the proximal ends of the ureters in the wounds in such a way that the urine, instead of going downwards to the bladder, would constantly dribble away from fistulous openings in the lumbar region. Sometimes the kidney (nephrectomy) is most easily removed by reaching it through a wound in

the median line of the abdomen. The peritoneum must be divided over the kidney before the extirpation can be accomplished.

LAPARO-ELETROTOMY.

Laparo-eletrotomy is a term used to designate an operation for the removal of the child from the uterus without cutting the uterus. It is intended to take the place of cæsarian section and it is done by making an incision from the spine of the pubis to the anterior spine of the ilium, then cutting through the peritoneum or pushing it up, the vagina is reached and opened and the child if presenting by the head is turned and delivered through the os uteri. It may be practised upon sheep or dogs, the incision being made from the pubis to the anterior spine of the ilium of these animals will enable the operator to introduce his hand into the pelvis to search for the vagina and incise it. He will in doing this observe how easily the bladder may be wounded in the removal of a child, through the operation of laparo-eletrotomy. Many of the successful cases of this operation have required subsequent operation for vesico-vaginal fistula and no doubt many of the fatal cases have followed extravasation of urine.

Good surgery would require one making this operation to inject the bladder with warm water or to use other means to find a rent or cut in the bladder, and when found close it with suture passed through its peritoneal coat.

It is difficult after comparing this operation with the cæsarian section to see where the advantage over the latter is. There might be a fancied advantage if the peritoneum were not wounded but such a result is quite improbable. The absence of sutures and a large wound of the uterus and the avoidance of the copious hemorrhage which follows the division of the large uterine sinuses in the laparo-hysterotomy operation, one can easily see would be very favorable for recovery. On the other hand, an extensive, incised, lacerated and contused wound of the deep pelvic connective tissue as required in the operation of laparo-eletrotomy would be very likely to set up a very grave cellulitis.

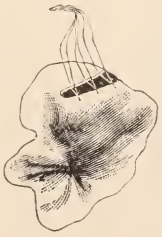
THE UNION OF INTESTINAL WOUNDS.

The union of intestinal wounds by suture was practised by the early masters of surgery, and it is impossible to give a fair conception of the different methods of employing intestinal sutures without referring to them. JEROME, of Bruynswyke, in his work entitled "*The Noble Experyence of the Verteous Handy Werke of Sergeri*" (London, 1525), says: "If that the wound of the belly is not grate inowgh, then shall ye make it greater, as I shall shew you hereafter, then shall you take out properly the guttes and sow it thereafter as it is nedeful with a skymers nedyll. Jamericus, Theodoricus, Rogerius lay elder pypes in the guttes, under the seme, that the seme rotte not. WILHELMES and some other, lay therin a part of a cryer of a throte gall of a beest, as the IV masters sayeth. But ZANFRANCUS and GUIDE they think it not be profytable, for nature is inclyned to outdrawynge straunge thyngys and thus igt helpe not therefore it was layd, and it is better that the guttes be sowed, as afore is sayd, and that it be clensyed of the unclenes." The four masters mentioned here, practised in Paris, from 1235 to 1280, many years before JEROME wrote his terse work. They tried to unite wounded intestines by bringing the cut surfaces together over cylinders of dried intestine, bone, tallow, wax and almost anything that could be made to fill the lumen of the bowel and hold the cut edges in apposition. These various articles were expected to pass away by stool. Other French surgeons devised certain rings and ferrules of metal to be used in accordance with the principles laid down by the four masters, but no one now-a-days thinks of resorting to such cumbrous methods. It requires just as much skill in the use of the needle to sew the wounded bowel over any of those things as it does to make the suture of LEMBERT.

GLOREI'S suture is formed by passing the needle obliquely through the sides of the wounds when held together by an assistant.

LOOP SUTURE OF LEDRAU.

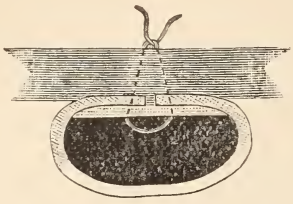
Having prepared as many ordinary sewing needles and threads as wished to make stitches, the edges of the wound well approximated, and each needle passed transversely to the line of the wound, the threads on each side being tied together, the two bundles were collected together and twisted into one, so as to pucker up the edges of the wound.



LOOP SUTURE OF PALFYN.

A ligature being passed through the middle of the wound in the intestine so as to leave a

loop on its inside, the ends were left out of the external wound, so as to draw the serous coat



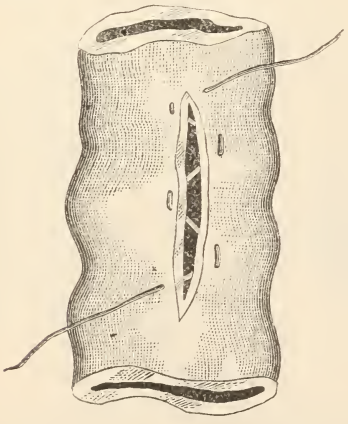
of the intestine up to the peritoneum lining of the abdomen, after which the abdominal wound was closed and the threads fastened upon the skin by adhesive strips.

SUTURE OF HEYWARD.

A small, thin, and oiled piece of light wood, twelve to fifteen lines long, and four to six broad, being first introduced into the intestine at the wound with a piece of thread attached to it, each end of the thread was armed with a needle. After passing each needle from one side to the other, from the inside outward through the thickness of the intestine, and also of the abdominal parietes, the wooden plate was drawn upon so as to compress the peritoneal coat of the intestine against the serous lining of the abdomen, and close the wound hermetically. When the adhesions thus excited seemed to be sufficiently strong, that is, in about three days, the thread was withdrawn, and the little plate of wood left to be discharged by stool.

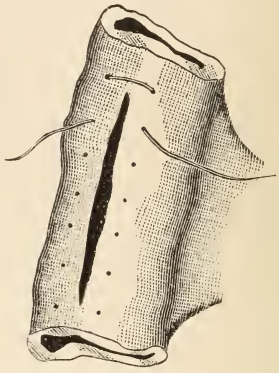
SUTURE OF GELY.

After cleansing the edges of the wound this surgeon turned in the serous surface on each side with the needle, and passed the threads tranversely through them, at sufficient distances to keep the serous membrane of each side in contact. Then the ends, being knotted and tied as in the interrupted suture, were left to come away by stool, or they were twisted and brought out of the wound, as in the suture of LEDRAU.



BERTRANDI'S SUTURE.

The lips of the wound being approximated, pierce them both rather obliquely about two lines from their edges, and one from their extremity. Then repassing the needle in the same way on, the opposite side, two lines further on, continue them in the same direction to the other end by a series of equal stitches. The intestines being reduced, fasten the end upon the abdomen, and three days subsequently cut off one end of the thread near the wound and draw out the other.

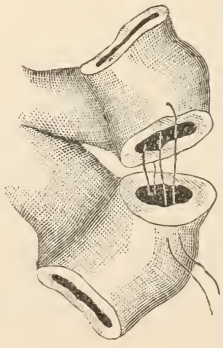


SUTURE OF LONGITUDINAL WOUNDS.

Suture of RAMSDOHR.—Invagination of the two ends of the intestine being accomplished, this surgeon stitched them together by two or three points of the interrupted suture, reduced the intestine and left the suture to the efforts of nature If the mesentary interfered with the invagination he excised it to a sufficient extent.

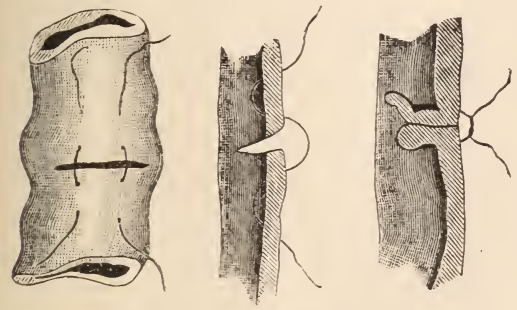
Suture of JOBERT—With a piece of silk passed at each end into a needle, JOBERT operated as follows: After traversing the anterior part of the upper end frem without inward with one needle he then passed both needles from within outward through the lower end of the intestine, and after placing as many threads in this manner as were sufficient to unite the wound, invaginated the intestine by gentle traction upon the thread, and either knotted them on the outside of the inferior end, or brought them out of the wound and the abdomen.

SUTURE OF JOBERT.

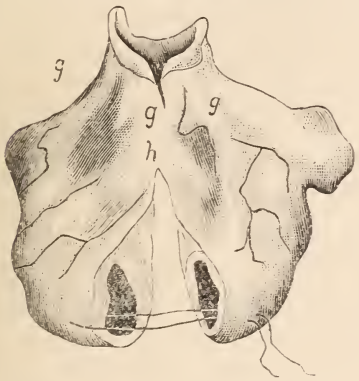


Suture of LEMBERT.—After preparing as many threads, each armed with needles as seemed requisite, one needle was pushed through the coats of the intestine as far as the mucous membrane from without inward and then repassed from within outward, so as to come out about one line from the edge of the wound. Then

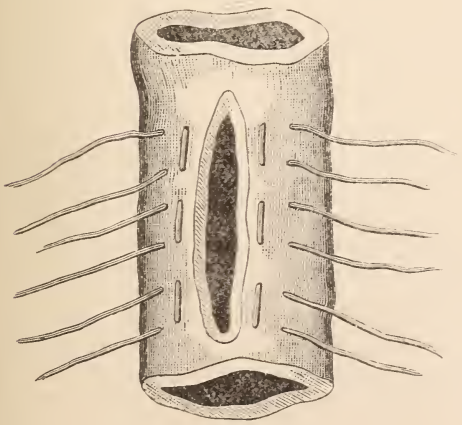
passing it across the fissure, he carried it from without inward at a similar distance from the opposite side of the wound and brought it out again at a distance of about three lines from its point of entrance. All the threads being passed in a similar way, the serous surfaces were brought in contact, so as to force the lips of the wound to double inward and form a sort of valve, after which the knots were tied, the ends cut off, and the intestine reduced.



SUTURE OF LEMBERT.



TREATMENT OF WOUNDED INTESTINE ACCORD-TO JOHN BELL.



EMMET'S SUTURE.

With threads each armed with two needles; as many of these loops as the size of the wound may require are placed, and the opposite ends of the ligatures are tied together. EMMET claims that it obviates some of the weightier objections to the methods of LEMBERT.

BALDNESS—WHAT SHALL WE DO WITH IT?

BY E. B. WARD, M. D., LAINGSBURG, MICH.

In the issue of June 25th last your very excellent periodical contained an editorial on "Baldness—What shall we do with it?" This was supplemented by an extract from an article by DR. GEORGE T. JACKSON in the Medical Record, wherein the doctor proceeded to show the cause, and, so far as known, the prevention and cure of alopecia.

The article interested me much, not because I am bald, for fifty years of age finds my head far from lacking in capillary covering, notwithstanding the fact (as I have been told) that I was born bald, or nearly so. It interested me by the various reasons given as a cause of baldness, and also by the plan of treatment suggested, simply because experience does not bear out the conclusions arrived at.

Now, as I am not one of those literary doctors so feelingly and frequently referred to by the medical press of the land, my ideas may be presented in crude form and seem somewhat clotted with ignorance; still, in my child-like innocence and simplicity, I would like to have certain questions respecting the disease—if it is a disease—answered, and doubts removed, so that we shall all, through the medium of THE AGE, know how it is ourselves. That baldness is fearfully on the increase, especially among young men, cannot be denied. The back hair of an auditorium filled with men of any ordinary sort always reminds me of a pool table after the first shot, and that the recent meeting of the American Medical Society presented the same appearance proves little towards intellectuality being one of the causes of it, especially when we remember that doctors are particularly subjected to the "hot-hat" theory of its cause. Again, we must remember that the rear view of an audience at the "can-can" show presents the same wonderful phenomenon—down towards the foot-lights. Further, we know that intellectual women are no more prone to baldness than their ignorant sisters. In regard to churches and theatres being better supplied with bald heads than low places of amusement and prize fights, cannot this be accounted for on the same principle as the vices of the latter class, viz.: the force of early training?

This brings us to these several questions which everybody would like to have satisfactorily answered. Why are not women bald? If heredity, as DR. JACKSON thinks is a cause, why are not the sisters of a family of baldhead-

ed boys bald? If lack of care and filth is a cause, why are not the western savages—who never pay any attention to their own dirty scalps, but direct their attention entirely to the scalps of others,—why are they not bald? One can go up through the Sioux nation away into Montana, as I have been, and the oldest buck he can find will have more hair on his ugly pate than a whole roomful of average Detroit clerks who have their hair clipped every week and shampood Sundays,—to make it grow.

Is not the "alopecia prematura" of to-day due to our higher civilization? To the "hot hat," and the barber?—principally the latter? I can remember when every man was his own shaver and some good handy neighbor did his hair cutting. The barber shops were dingy and frequently dirty places occupied only by gentlemen of the African persuasion. Now what are they? Gilded h—halls where tonsorial dudes gracefully toss scented foam on your face and rub rose-colored palms over your comparatively dusky cheeks and chin and inquire smilingly if you will have a sea foam shampoo and your hair shortened a trifle? when perhaps you had it clipped only the day previous.

The boy brought up in the average family of to-day has his hair cut early and often until he catches onto the close cut which he keeps up until about the time he reaches maturity he finds his hair coming out and growing thin on the top. Then he becomes alarmed and struggles to regain his covering and the barber helps him with hair tonics, shaving and shampooing, until the poor over-stimulated hair follicle gives up the ghost and dies from exhaustion. Did you ever notice, that a close shaven lawn will not survive the slightest drouth, while on a neglected one the same grass is hard to kill out, even when you try to do so. So with the constantly stimulated hair follicle. But right here some one asks, why does not the beard fall off? It does if kept shaven, but not perhaps to the same extent as the hair, because it is constantly exposed to the air, and further the beard differs from the hair in that it is coarser and dips deeper into the cutaneous tissues. It is so to speak the marsh grass of the hirsute headlands, while the hair is the cultivated portion.

The street gamin's and gutter snipe's hair goes uncultivated, and this being the source from whence spring the patrons of prize fights and low places of amusement, may account perhaps for their comparative exemptness from alopecia.

It must be admitted that the hot-hat has a deal to answer for in this matter, for it is not an uncommon thing to see the boundary line between the hat and the hair well marked. Still, the "greasers" in Mexico wear a leather sombrero with impunity, but they never cut their hair to any considerable extent, and they are not bald. Again, visit any office in Detroit where clerks are employed who only wear a hat to and from their meals, and then go down and look at the street-car driver, who wears a hat continually but has no money to squander with the barber. Mark the difference.

Women are not bald because they wear nothing or next to nothing on their heads and do not cut their hair! They cultivate the growth of the hair, not by a shampoo or a close cut but by the old original "cultivator" of our boyhood days, which during our exposed condition at school used to bring in certain wonders of the animal creation in addition to the usual exfoliation. This is all the cultivator that is needed.

Dr. Jackson advises a shampoo of soap and water or borax and water to be practiced through life. I would like to see those Sioux Indians try that long enough to make them bald and then see them go off and hate themselves to death. The hair needs no soa por other alkali to go through it like a search warrant, destroying all the oleaginous matter which nature has supplied and which must be replenished by artificial means, or the hair seems dry—and it is dry and husky—and lacks lustre.

And now, my young professional friends—no use talking anything but "go up" to the old bald heads—if you have any hair left that you want to preserve, take my advice before it is everlastingly too late, and avoid the barber. The women do, the savages do, the gutter snipes have to and the "greasers" always do, and they are not bald.

If you have a wife, mother, sister or daughter, or even a barber who will carefully comb your hair and remove the dandruff once a week with a fine-tooth comb—spend half an hour at it if necessary—and then if you want to wash your scalp, do it with clean soft water, and never use on it any soap, oil, or pomade, and never allow your hair to be cut close enough to expose the scalp; and when it shows symptoms of dropping out let it grow, instead of cutting it off—three or four times a year is often enough to cut the hair. Never use any hair invigorator or other anti-mortem nostrum, and give your head as much air as possible. I say if you will do this you will carry as many grey hairs down to the grave as our present civilization will permit.

I know whereof I speak in this matter from practical observation, as well as from personal experience, and if the conclusions at which I have arrived are not satisfactory to the average reader of the Medical Age I would like to have the question referred to Dr. Foster Pratt of Kalamazoo, Dr. T. A. McGraw, and Dr. Connor, of Detroit—three of the brainiest of my many hirsute professional friends that I can think of just now.

"ALCOHOL."

BY J. K. HOFFMAN, M. D., POUGHKEEPSIE, N. Y.

In my "Article" on Psychological Medicine, I mentioned "Alcohol" as a *non-electrolyte* or *non-conductor*.

In PROF. BARTHOLOW'S Materia Medica, we find under the head of the "Physiological Actions of Alcohol", the following points of interest, which I will endeavor to account for according to the "theory" I advanced in my last article.

The first of these is; that alcohol has been found, and is known to coagulate albumen and harden the animal textures. From chemical analysis we know that next to water, the greatest constituent of the gray and white substance of the brain is albuminous matter, which, according to LASSAIGNE amounts in the gray matter to 7.5 per cent., in the white 9.9 per cent. in every 100 parts. These substances we know are also found, more or less in most of the animal tissues in combination with fats, gelatinous substances, etc., according to position and functions. Alcohol also has a remarkable affinity for water, which it abstracts from the tissues. What the final result is and must be, it will not be necessary for me to enter into.

2. PROF. BARTHOLOW further says: As alcohol is a very diffusible substance, it enters the blood with great facility, and is probably almost all taken into the stomach, passes into the blood from this organ, and does not reach the the small intestine. The liver is consequently the first organ, after the stomach, to be influenced by the ingested alcohol. The blood of the portal vein rendered more highly stimulating by the presence of alcohol, increases for the time being the functional activity of the liver-cells, and as is the case with the stomach, a more abundant flow of glandular secretion follows. Frequent stimulation and consequent overaction, result in impairment or loss of the proper function of the part, as is the universal law. The hepatic-cells, overstimulated, produce an imperfect product; they are affected by fatty and atropic changes, and shrink in size; and the connective tissue of the liver undergoes hyperplasia. The first result of the structural alterations is an increase in the size of the organ; but with the shrinking of the hepatic cells and the contraction of the newly formed connective tissue, the liver becomes smaller, nodulated and hardened (Cirrhosis).

3. Further it has been found that within a certain limit alcohol may be disposed of by the organism by oxidation.

The treatment of acute alcoholism is the cautious use of ammoniacal gas, and faradization of the muscles of respiration.

I don't think that anyone will for a moment deny, or doubt, that the nervous system is the direct source of all functional activity. Certainly the nerves themselves are merely conductors of "life-force," while the nerve centres are the seat from which all nerve force starts direct. Microscopical analysis of a nerve after death shows a change in its appearance; this is most likely due to a coagulation of its fluid composition. This, at any rate, is the final result, according to my knowledge of the subject, when an excess of a non-electrolyte, as alcohol, has entered into the system. Chemical action of the body will decompose and remove this poison from the system, quite rapidly for a time, and overcome almost completely its injurious effects on the nerve and tissue structure. I say almost, because I believe that just as in malaria, repeated engorgements of the spleen, more and more distend this organ beyond its limit of elasticity, so must it be with effects of alcohol. The strain on the system becomes so great, the chemical components, owing to the weakened condition of the organs whose office it is to purify and reconstruct, become altered, and therefore the counter-effects become weaker and weaker, the poisonous effects of alcohol more and more marked, and the brain substance is probably the first to become seriously impaired, not so much regarding its higher functions over the mind as those controlling the functional part of the organism. For instance, let the semi-fluid or gelatinous composition of the brain and nerve substance become altered in any way, and the absolute result must be a decrease in the conducting power; and decrease in the conducting power means nothing more or less than a diminished supply of life force. Diminished activity in any organ produces a greater or less change in the decomposition of its chemical composition, and finally structural changes are the result; naturally beginning in those parts, and in those organs whose affinity for this particular poison is greatest, and whose structure is the most delicate.

The second principal effects, as we have seen from the foregoing, are, the remarkable affinity of alcohol for water, and its power of coagulating albumen. As water is one of the chief constituents of brain and nerve substance, as well as of the remaining organs and structures of the body, it is perfectly natural that as soon as the water is abstracted from any structure, shrinkage of the part takes place, and as albumen is also a chief constituent of just those portions of the body which are most susceptible to the injurious influences of this slow, but deadly poison, a coagulation of this substance must produce, in time, serious results.

Probably the first effect of alcohol takes place in the nerve centres and nervous system generally, not however of sufficient power to produce any specific derangement of the higher functions of life, but the action of the ner-

vous centres become impaired (at first only temporarily) becoming deprived of their activity and control over certain organs: and here the vaso-motor is the first to suffer: first from overaction, and later on, as the changes in nerve substance become more permanent, the organs necessarily suffer for want of a proper amount of stimulation and vital force, to assist them in performing their functions. Decomposition consequently becomes more and more impaired; the fats are no longer acted upon, and consequently accumulate; chiefly in those organs whose chief function and office it is to preside over the blood and circulation, and, finally, a fatty degeneration takes place. Or, if any other organ, such as the kidneys are in a naturally weak condition, the first evil results will take place here; as it is generally known that the condition of an organ or part of the body has a great influence over its suceptibility to any foreign influence.

In another portion of my article I speak of faradism, as a treatment for acute alcoholism. Pepsin we know will dissolve albumen, but as pepsin expends its force on the digestive apparatus, we can only use it for its local effect, to assist the process of digestion. As in alcoholism however, the coagulation of the albuminoids is of a more or less general character, affecting liver, brain, etc., it is necessary to resort to a treatment which goes directly to the affected parts, acting as a solvent. Such a treatment I feel we have in electricity. In order to convince myself of the solvent power of electricity on albumen, I supplied myself with a very hard-boiled egg; removing part of the shell, I inserted the positive electrode of a six element galvano faradic battery in one side of the egg, and the negative pole in the other side. I now made connections, and after 10 minutes time I found the albumen completely softened and almost liquified at the *negative pole.*

Oxygen, we know will oxidize alcohol, so between the two I feel that much good can be done in these cases, by the combined use of faradism of the muscles of respiration, and the nerve centres; and inhalations of oxygen, as well as the internal administration of diluted oxygen.

ON THE ACTION OF MEDICINE.

BY ZINA PITCHER, M. D., DETROIT.

It is with pardonable pride that the regular practitioner looks upon the marvelous advancement his school has made in histology, pathology, operative surgery, etc. But for a similar advancement in materia medica and therapeutics he looks in vain. Many useful drugs have been added to our already large list, new light has been thrown upon the action of old ones, new uses suggested. But that deep scrutiny into their physiological effects, is wanting. Other branches of medicine are given the most profound thought and investigation, the most minute detail of a new surgical procedure given. Yet when a new drug is introduced it is said to have a happy effect in some particular line and then it stops. Eminent writers; authors of text books on the subject, dismiss a drug often with a botanical description, a list of its officinal properties and the remark that it resembles some understood drug of the same class in its action, or that it is a substitute for it: true, it may resemble on the whole its brother drug; yet it must possess some highly important points of difference or it would not as is often the case, relieve symtoms untouched by its brother, adapt itself better to the peculiar phases of the case and the idiosyncrasies of the patient. If, then, it does possess some virtue peculiar to itself, why is it not given as prominent a place as those not substitutes? Why not italicize its points of difference? bring them out as prominently as the differentiating symptoms between diseases having a close resemblance, and enable the practitioner at once to prescribe correctly, and not first try something else. It is only by this system that a rapid and intelligent advancement can be made. The student of to-day complains, as did the student of five (5) years ago, of the insufficient and garbled history of a plant and its *action.* This should and can be remedied by a closer attention to detail. Frederick the Great said: "Facts are divine things." In medicine they are doubly so. Let us have them.

Correspondence.

SYRUP TRIFOLIUM COMPOUND.

In the few cases in which I have tested the syrup trifolium compound I have been quite satisfied with the results, and am of the opinion that it is not only an efficient remedy in secondary syphilis, but its beneficial action will show itself in many other diseases in which an alterative is indicated. I will briefly state a few cases in which I have used this preparation:

Case 1.—A. G., aged 40 years, farmer; tertiary syphilis. Contracted disease about eight years ago, and suffered from syphilitic rheumatism, affecting the long bones, frequent frontal headache and recurring sore mouth and throat. Patient had been treated with large doses of iodide of potassium, which would relieve the rheumatic pains, but the affection would return again after treatment had been discontinued for a month or two. Donovan's solution, succus alterans, and other anti-syphilitic remedies were tried, but procured only temporry benefit. About four months ago I put him

on full doses of syrup trifolium compound, using locally for the mouth and throat affection gargles of Listerine and chlorate potassa. Under this last treatment, patient improved, and at the present time every symptom of the disease has disappeared. I advised him to continue using the syrup trifolium compound in moderate doses for another month or two.

Case 2.—Mrs. L. M. has been troubled with a non-syphilitic chronic eczema (psoriasis) for nearly two years, affecting the back of neck, part of arms, and palms of hands. Had been treated locally with different lotions and ointments, among the latter oleate of copper, resorcin, chaulmoogra. Internally she had taken Fowler's solution, sulphide calcium, burdock, sarsaparilla comp. Treatment was very unsatisfactory. The eczema did not extend any further, but those parts affected remained in about the same condition as they were before treatment was commenced. About six weeks ago I commenced giving her syrup trifolium compound, four teaspoonfuls daily. Locally I ordered bathing parts freely with hot water, and then applying an ointment of oil cade, oxide zinc and carbolic acid. Prompt improvement was the result of the latter treatment, and patient will be entirely cured in the course of a week or two.

Case 3.—A. R., male child three years old; scrofulous habit, swelling of lymphatic glands, purulent discharge from ear, catarrh of mucous membrane of the nose, wasting of body. Had been treated for nearly two months with syrup iodide of iron, cod-liver oil, calcium muriate internally. Locally with iodine ointment, iodoform and carbolic acid. Was not benefited by this treatment; disease remaining stationary. I put him about a month ago on small doses (15 minims) syrup trifolium comp., to be taken four times daily before meals, an emulsion of cod-liver oil after meals, nourishing diet, and a daily warm salt-water bath. Locally, for the glandular enlargement, continued with the iodine ointment; for the ear and nose used lotions of Listerine and boracic acid, also injections of a weak solution of common salt. The child improved fast. Glandular swelling reduced, discharge of ear ceased, nose better, gaining flesh and strength, and having an excellent appetite.

In those cases stated above I can not think otherwise than that the good results of the treatment was mainly due to the syrup trifolium compound, as no improvement was perceptible until the syrup was substituted for the former internal remedies.

A. CRULL, M. D.

DITTMER'S STORE, MO.

DR. ELLIS, the lady who is attending physician to the Queen of Corea, receives $18,000 per annum.

A POLYPUS COMPLICATING PREGNANCY.

On the 21st of last December I was called to attend Mrs. W., in confinement. She had a normal labor and was soon delivered of large male child. The uterus contracted firmly, but I failed to deliver the placenta until, after considerable trouble, I succeeded in dilating the uterus sufficiently to admit my hand. I then succeeded in separating the placenta from the walls of the uterus, when both my hand and placenta were expelled by contraction of the uterus. I examined carefully and satisfied myself that I had delivered the whole of the placenta. I was informed by the husband that she had been delivered of a child four years before, and that she was troubled for months with spells of flooding. She got along very finely until about the 10th day, when, on trying to sit up for a little while, she was taken with a pain resembling a labor pain, and soon began to flow to an alarming extent. I was sent for, and soon stopped the flow with ergot. After this I was sent for almost daily, she saying that was just the way she was before. I finally placed her on five-drop doses of the oil of erigeron every two hours. She had been on this treatment for about six days, when I was sent for to see "what had passed her." I found a polypoid tumor about the size of a small pullet's egg, with a pedicile about one-half inch long. The tumor was firm and solid, the neck being almost transparent, somewhat resembling tendon.

She made a rapid recovery, and has enjoyed perfect health ever since.

Was the polypus the cause of the former trouble? and having an almost new vascular neck, how did it cause the hemorrhage? Will some of the readers of THE AGE please express themselves on the subject?

F. C. MILLER, M. D.

TACUNA, W. T.

A recent writer on bow-legs and in-knees speaks of the relative frequency and curability of these deformities. After many observations he noted the fact that bow-legs is quite common among colored children, and that they often grow out of it, but still their legs rarely become as straight as the Caucasian idea of form and symmetry requires. Bow-legs are more amenable to treatment than in-knee. Braces and splints are the remedies for these affections. For in-knee use the splint at night only, and in all cases resort to daily rubbing and bending of the distorted legs.

DR. METCALF, of New York, says that no prescription for sciatica has ever equalled in efficacy the following: ℞ tinct., aconit. rad., tinct. colchic. seme., tinct. belladonnæ ää ʒ i-M Sig. Dose, six drops every six hours.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., SEPT. 10, 1887

Editorial.

THE TREATMENT OF FISTULA IN ANO WITHOUT OPERATION.

Dr. E. Andrews, of Chicago, contributes to the Medical Journal and Examiner an article on this subject, the conclusions of which acquire additional weight from the writer's reputation in this field of surgery. A diagnosis of fistula in ano carries with it the suggestion of a knife, in the mind of the profession at large. Those who have undertaken to relieve without a cutting operation have usually not been at all satisfied with the results. The reason, judging from Dr. Andrews' conclusions, has lain chiefly in the defectiveness of the means employed. The doctor holds that when the fistula is simple and contains no large pouches, and leads pretty directly to the rectum, there is an excellent prospect for cure without any strictly operative procedure. The method to which he lends his preference is the following:

First, explore the interior and ascertain that it is simple enough to give the prospect of being able to make the injections reach all parts of it. Next, bear in mind that this fistula must have a free external opening; otherwise it will confine a quantity of septic pus in the interior, which both by mechanical distention and irritant qualities, will arrest all efforts at healing. It is therefore best in many cases to enlarge the external portion of the sinus with a bistoury or with a laminaria tent. This being accomplished, inject the whole interior of the fistula carefully with a good vigorous article (for that sold in the shops is very variable) of hydrogen peroxide. It will be better to inject this through a small catheter inserted into the deepest parts of the channel, or else throw it in by a syringe whose beak is large enough to completely fill the fistulous opening, so that the pressure shall compel the fluid to find its way into the remotest parts. Throwing the solution in repeatedly, and giving it time between the pulsations of the syringe for the foam produced by the action of the medicine on the pus to boil freely out, we next leave the patient quietly on the lounge an hour or two. Then with a small syringe insert about 10 minims of a solution of bichloride of mercury of the strength of one part to 3,000 of water. Repeat this once in about three or five days, taking pains not to throw large quantities of irritating solutions through into the rectum. This procedure alone will cure a considerable proportion of cases. But if greater thoroughness is required, some advantage will be gained by taking Allingham's rectal speculum and, exposing the internal orifice of the fistula, touch the opening with a stick of nitrate of silver where it enters the rectum, and place the patient in bed with a sheath of three soft rubber catheters lying side by side in the rectum to give exit to the gases and mucus. The bowels should be previously emptied with a cathartic.

There has been a very general opinion in the profession that it is not expedient to cure a fistula where the patient is inclined to tuberculosis. Dr. E E Glover of Terre Haute, Ind., has taken the pains to ascertain of a large number of surgeons, on both continents, their opinion on this subject by which he discovers that there is apparently a very great change of opinion on this question. He finds that those who reply to the question as to whether they would operate in tuberculosis cases the following who say yes: Allingham, Agnew, Andrew, Brinton, Brodie, Bonteson, Solis Cohen, Cole, Francis De Lafield, Eastman, Engelmann, Gunn, Hamilton, E. F. Ingalls, Lane, Linthicum, McGuire, Mathews, Moore, Owens, Peck, Raney, Sayre, T. G Richardson of New Orleans, Roberts, of Philadelphia, Wight, Wilson, Varich and Taylor.

Dr. Andrews' opinion is that there is no objection to curing the fistula in such cases. On the contrary, it is beneficial to the patient to do so. But it is true that where it is done by incision the wounds do not always heal well, and if the patient has but a year or two to live on account of his tuberculosis, it seems scarcely worth while to submit to the annoyance of the operation. But this would be no reason why he might not be advantageously treated by gentle and non-operative methods, such as we have described.

ONE WAY TO PREVENT THE SPREAD OF DIPHTHERIA.

The Michigan State Board of Health has found it advisable to call renewed attention to the following resolutions adopted by it over five years ago:

"Whereas, It is often difficult to recognize mild cases of diphtheria, or to distinguish such cases from a simple pharyngitis, or laryngitis, and

Whereas, Such mild cases of diphtheria often communicate a dangerous and fatal form of diphtheria;

Resolved, That it is the duty of physicians and house-

holders in reporting diseases dangerous to the public health, and of local health authorities in their efforts to restrict such diseases, in every case to give to the public safety the benefit of the doubt;

Resolved, That suspected cases of dangerous diseases should be reported, and precautionary measures should be taken."

The wisdom of observing these rules will be conceded by all, and yet, owing to some idiosyncrasy, either of indifference or obstinacy, on the part of the physician, they are regularly violated. The following circular from the State Board of Health details a case in point:

Information just received at the State Board of Health office illustrates the immense importance of extreme care in dealing with contagious diseases. A young man whose parents live in Brighton, died in Detroit a few weeks ago after a week's sickness. The attending physician called the disease at various times, "putrid sore throat," "gangrenous sore throat," and "ulcerative tonsilitis." He died of failure of the heart, a common mode of death in diphtheria. The remains were sent to Brighton, and on the casket was a certificate that he died of "heart-clot." As the boy was well known in Brighton, it was proposed that the high school go in a body to his funeral, but the principal of the school, and the health officer of the village, suspecting that all was not right, vigorously objected to any children attending the funeral. About Aug. 1, the lady with whom the boy lived in Detroit, visited the boy's parents in Brighton, bringing his clothing that had been left with her. In ten days after her arrival, two children in the family were taken with a malignant form of diphtheria, one dying Aug. 23, and the other, when last heard from, being in great danger.

From the statement of the case there can be little question that the boy died in Detroit of diphtheria. The father says that if his children in Brighton have diphtheria, then his boy in Detroit had diphtheria, because, he says, "it is the same thing." The members of the family in Detroit have since had sore throats.

There seems to be little excuse for the attending physician in Detroit, even on the supposition that he did not recognize the disease as diphtheria; for common sense dictates, and the State Board of Health has long taught, that in cases of sore throat the same precautions should be taken as in undoubted case of diphtheria. If the attending physician did recognize the disease as diphtheria, and then failed to report it to the health officer, and certified that it was 'heart-clot," he is even more guilty. If he had reported the case to the health officer of Detroit as diphtheria, or as sore throat which might be diphtheria, as he ought to have done, probably the body, clothes, room, etc., would have been disinfected, and the lives in Brighton and elsewhere would not have been endangered.

THE AIR OF SEWERS.

It is a popular belief, encouraged by the *ex cathedra* declarations of the profession, that the air of sewers is of extremely deadly composition. As a consequence, the sewers are regarded as dangerous, above all things, to public health, and the skill and ingenuity of the artisan have been taxed to their utmost to devise such systems of plumbing as will guarantee the non-entrance of the poison-laden emanations into the dwelling house. The store room of a first-class plumbing establishment presents a really formidable array of devices, and the prospective buyer is treated to long and learned dissertation by the intelligent salesman, on bacteria and gases and the means for protecting the air of the living-room against contamination by them. Such is the popular feeling on this subject, that the business of the plumber who cannot discourse learnedly thereon is seriously jeopardized. The artisan derives his information from his trade journals, and they, doubtless, keep well abreast of the improvements marking their specialty. We had occasion recently to visit a plumbing establishment in the interest of a patron who was building a residence, and were made to feel our inferiority in the division of sanitary science, by the learned salesman who, when he discovered our calling, took us aside and, with rather pleasing *naivete*, gave us to understand that a man always talks best on what he knows least about, and that it was necessary, in his business, to talk learnedly on the subject of sanitation. When one is confined to facts there is left no field for imagination.

Recent observations in connection with the dredging of sewers emptying into Baltimore harbor are calculated to somewhat disturb existing notions on the deleteriousness of sewer-air. PROF. CARNALLY and MR. HOLDONE, who have been conducting the observations, were struck with the immunity from disease among the laborers employed in the work, and a comparison of the atmosphere in which they worked with that which circulates in well-ventilated school-houses, for instance, showed a much smaller proportion of pathogenic germs in the sewers. This will seem hardly credible, but it is quite in harmony with the statement of PROF. TYNDALL as to the purifying influence of rest on the atmosphere. In undisturbed air all organisms gravitate to the bottom, thus accounting for the surprising purity of the air of old vaults and unused cellars. A draft into these places stirs the air from the bottom, and the whole mass becomes permeated with the sediment of germs. These observations are calculated, further, to disturb existing notions on the question of the ventilation of sewers. It is held by many that in such ventilation we have a solution of the problem of plumbing.

If, however, a current of air but serves to wake from their peaceful slumber the disease-germs, it were much better to keep out the air. On the principle that it is an unwise procedure to kick a sleeping dog, if the observations herein referred to shall be substantiated by future experiments, it would seem to be the better policy to let the sewers severely alone. Certainly these observations are not calculated to make tranquil an already perplexing subject.

PROSTATOTOMY.

A. Groves, M. D , of Fergus, Ont., presented the following article before the Ontario Medical Association: Having lately practised the operation known as prostatotomy on several occasions, and having found that marked improvement, amounting often to cure, resulted, I thought the subject might not be altogether unworthy the attention of this association, more especially as the operation is one rather rarely resorted to for the relief of patients suffering from the effects of prostatic hypertrophy. If an excuse were needed for bringing this subject before you, it would be furnished by the fact that there is perhaps no disease which entails so much suffering and discomfort in a considerable proportion of men beyond middle life, as does a prostate, which by its size, interferes with micturition to the extent that requires the constant use of the catheter when the passing of this instrument is painful and difficult or is followed by hemorrhage, or in those cases in which the relief following catheterization is of short duration, and the bladder contains tenacious mucus or pus. It is in such cases that the operation in question is more particularly applicable and the results obtained especially gratifying. The operation is similar to an ordinary median lithotomy. The patient is placed in the lithotomy position and a staff, grooved on its convex surface, passed into the bladder. The incision is made exactly in the median line, and the membranous portion of the urethra opened close to the prostate; then an ordinary lithotomy knife is passed along the grooved staff and the obstructing portion of the prostate incised, a drainage-tube is inserted, the staff withdrawn and the patient put to bed, means being taken to prevent the tube from slipping out. As a rule, there is no bleeding of any account; the patient relieved of his ever-present source of irritation promptly improves. As advised by Harrison, it is well in many cases, if not in all, to use a tube large enough to allow a soft-rubber catheter to be passed through it, as this instrument is now irritating and can be removed and cleaned without annoyance or worry to the patient. The system of drainage should be kept up for a considerable time, say from one to three months, the patient, of course going about after the first few days, the urine being caught in a rubber urinal.

THE EFFECTS OF TRANSFUSION UPON THE HEADS OF DECAPITATED ANIMALS.

In the Southern Medical Record mention is made of a series of experiments by M. M. Hayem and Barrier, on the heads of animals recently removed from the body by sudden decapitation. The experiments that were undertaken were interesting, inasmuch as they show that the post-mortem persistence of cerebral excitability is real. They consisted in passing a current of arterial blood from a living horse directly into the carotids of the decapitated heads of dogs. In this way transfusion could be performed before the head became inert. The first question sought after was the latest point of time after decapitation of the head that transfusion was capable of causing the reappearance of manifestations of consciousness and will power. They find that a transfusion made ten seconds after decollation was successful, but one made fifteen seconds afterward failed. These experiments go to demonstrate that the anatomical elements of the sensor and excito-motor centres have the power of recovering their suspended faculties under the influence of arterial blood. Among the manifestations noted were movement of the occular globes in their orbits, sometimes spontaneously and at others by the approach of a light, and even in response to the voice; shaking of the entire head, produced by the contraction of the cervical muscles under the influence of pain or fear; attempts at lapping the tongue whenever the head was approached with a basin of water; efforts at swallowing or rejecting pieces of sugar placed in the œsophagus; movements of the tongue in the effort to free itself from a bitter substance placed in contact with it, also in licking the lips, and finally the emission, in certain cases, of plaintive cries when a current of air was forced up over the glottis from the cut end of the larynx.

TREATMENT OF STRICTURE OF THE URETHRA.

In a paper read before the Medical Society of the State of New York, Prof. Otis emphasized the importance of determining the exact seat of the stricture before an operation is done or dilatation commenced. This can be ascertained by using the urethrometer, or bougie-á-boule, and by their use the author found that in one thousand cases critically examined, less than ten per cent. were located at a point beyond four inches from the urethral orifice. When the main symptom of stricture is diffi-

culty in urination, and only small flexible instruments can be passed, the fact is often overlooked that while there is obstruction in the deeper urethra, this may be due to spasmodic contractions of the membranous portion brought about by the presence of organic stricture nearer the meatus. If these anterior strictures are diseased and removed, a full sized sound may be made to pass with ease into the bladder.

SCROFULOUS GLANDS.

The treatment of scrofulous glands is often unsatisfactory. The children who are most commonly subject to the disease are too timid and feeble to undergo the operation of having them carefully dissected out, as some authorities advise. The plan of teasing out the sinus is likewise painful and not likely to meet with favor. M. VERNEUIL has proposed to inject the scrofulous glands with an ethereal solution of iodoform. He draws the pus off with a trocar and then injects fifteen or twenty minims of a 5-per-cent. solution. Another writer has injected non-purulent glands the same way, and has been highly pleased with the result. The constitutional treatment by means of cod-liver oil, etc., should be rigidly maintained while the local means are being carried out. Some weeks have elapsed in all the cases described before a complete disappearance of the enlarged gland has occurred.

ACUTE INFLAMMATION OF THE MIDDLE EAR.

D. B. ST. JOHN ROOSA thinks that in a large percentage of cases acute inflammation of the middle ear is a self-limited affection. He tries to secure cleanliness, and then dries the parts. He does not use dryness as a means of destroying the germs or preventing them from acting, for he does not believe in the germ theory of disease. He thinks that germs are the products and not the causes of disease and that they retard recovery and therefore should be removed. In a large proportion of the acute cases the only treatment required is irrigation with warm water, pro re nata, and drying afterwards. He believes that the pus has a chemical quality apart from the presence of the germs, which renders it corrosive. He therefore tries to keep the parts as free from pus as possible.

TREATMENT OF CORDEE.

Strapping the penis, or the mechanical treatment of painful erections, has received some attention from French surgeons. The plan is to fasten a belt around the waist, then arrange a sort of a T bandage by fastening to the belt a broad band in front. The free extremity of this band is split so that each strap can run in the gluteo-femoral folds on its way to be fastened to the back of the belt. When it is adjusted the penis is pulled down between the testicles, upon the perineum, the broad band covers it in and holds it down by means of the straps running through the gluteal folds to the back of the belt. The pain of chordee is greatly mitigated by the use of this contrivance. There being no tension upon the urethra the desire to urinate is much less frequent.

DISEASED FALLOPIAN TUBES.

The frequency of pathological conditions of the fallopian tubes, was the subject of a paper by DR. GARDNER, of Montreal, recently. His facts were taken from one hundred necropsies lately performed in the London Hospital. All of them were cases of death from pelvic disease; and seventeen were found to have distended fallopian tubes either hdro-, pyo- or hematosalpinx. It has been claimed that actual disease of the tubes was much less frequent than is commonly supposed, but 17 per cent. as shown by the above figures is certainly often enough to find these organs distended in the course of 100 general pelvic cases. In 302 necropsies of women above the age of puberty only 12 cases of diseased tubes were found.

DEATH OF DR. N. A. RANDOLPH.

A sad accident occurred on August 21st, on the New Jersey coast. NATHANIEL ARCHER RANDOLPH, M. D., one of the editors of the Medical and Surgical Reporter was bathing, when he was carried off his feet by the under current and disappeared beneath the waves DR. RANDOLPH was Professor of Hygiene at the University of Pennsylvania and was well-known as a hard worker. He was about 30 years of age.

Notes.

A correspondent contributes a note from his practice which tends to show that grief may be very poignant and yet not obliterate the sense of the beautiful. In the case of a patient suffering from meningitis, the head was ordered shaved. In a few days the man died, and his brother, on reporting the demise to the doctor, said: "It may be all right, doctor, to shave a man's head for that disease, but poor George makes a h— of a looking corpse."

The State Medical Society of California at the recent session in San Francisco, April 20th, unanimously adopted resolutions heartily ap-

proving the project of erecting a statue of "the immortal BENJAMIN RUSH," in the city of Washington, and requesting the various medical journals to call upon every physician in the State to contribute the very modest sum of one dollar each, to which the subscription has been limited.

La Tribune Méd., July 3, 1887, says that TEISSIER believes diphtheria to be an infectious disease whose germ is disseminated by means of atmospheric dust. He considers manure, rags and straw excellent media for the culture of these germs which are frequently disseminated by chickens and pigeons. A moist atmosphere is propitious to the development of the germs, and a chill renders the subject more likely to contract the disease.

PROF. GROSS says: To properly examine a woman's breast, she should be lying on her back. If examined in any other position, it can be so manipulated as to convert it into any tumor. When on her back, examine by pressing the tips of the fingers back through the chest against the breast's walls, and not by pinching the structures up between the fingers.

Apropos of young mothers, DR. N. L. FOLSOM, of Portsmouth, N. H., writes that he attended in her confinement a girl so much short of thirteen years of age that she must have conceived before her twelfth birthday. She was, moreover, very small in stature.

Sick man.—Am I to take all that medicine? Wife.—Yes, all of it. Sick man.—There's enough in that bottle to kill a mule. Wife.—No, there is'nt, John, or the doctor would'nt have prescribed it.—*Puck.*

A CORRECTION.—In DR. WYMAN'S article, on page 341, "Enterotomy" for gunshot and bayonet wounds, should read "Laparotomy," etc.

The cow is afflicted by a mild kind of scarlatina—so mild that it hardly causes her inconvenience, but this produces scarlatina among those who drink her milk.

Merited Honors to PROFESSOR ESMARCH.—Letters of nobility have been given by the Emperor of Germany to F. ESMARCH, Professor of surgery of the Faculty of Medicine at Kiel.

The Chief of Police of Chicago has issued an order giving the vehicles of physicians precedence at bridges, along with the mail and patrol wagons, ambulances and fire apparatus.

DR. LIEBERKUHN, Professor of anatomy at Marburg, died recently at the age of seventy-five.

DR. JOSEPH D. BRYANT, the eminent surgeon of New-York City, has been appointed Health Commissioner.

Salol, introduced by MENCKE, of Berne, is stated to be poisonous as it contains 38 per cent of phenol.

Resection of the pylorus has been performed by BILLROTH fifteen times for carcinoma, with success in seven cases.

PROF. BARTHOLOW states that he believes nicotine, if rightly used, will prove to be our best remedy for hydrophobia.

PROF. PARVIN, for all plastic operations on the female genitals, uses silver wire in preference to either silk or cat gut.

Book Notices.

STUDENTS' GUIDE TO DISEASES OF THE EYE. By EDWARD NETTLESHIP, F. R. C. S., Ophthalmic Surgeon to St Thomas' Hospital; Assistant Surgeon to the Royal London Moorfield's) Ophthalmic Hospital; late Ophthalmic Surgeon to Hospital for Sick Children. With a Chapter on Examination for Color Perception, by WM. THOMPSON, M. D., Professor of Ophthalmology in the Jefferson Medical College of Philadelphia.
Philadelphia: Lea Brothers & Co.

This is the third American from the fourth English edition of a popular student's work which is too well known and too extensively used in this country to call for much comment. The edition is a trifle larger than the previous issues, and, in addition to the old matter, embraces all matters of value that more recent workers in this branch of surgery have contributed to eye disorders and their cure. The chapter on Examination for Color Perception, by DR. THOMPSON, has been inserted from the previous edition, and is a valuable feature of the volume.

SYPHILIS. By JONATHAN HUTCHINSON, F. R. S., LL. D., Consulting Surgeon to the London Hospital and to the Royal London Ophthalmic Hospital; Vice-President of the Royal College of Surgeons.
Philadelphia: Lea Brothers & Co., Publishers.

In this admirable little work DR. HUTCHINSON has clearly and concisely grouped together all that is actually known of syphilis, and succeeded in laying down the general principles on which our knowledge of the disease and its treatment is based. His object has been to avoid hasty generalizations with nothing but an isolated case or two to sustain them and to give the surgeon the benefit of practical data gathered in the treatment of numerous cases. His conclusions are stated with candor, and his observations so fairly presented that the student can do his own thinking independently of

what the author says. The work is adorned with several excellent colored illustrations. It is dedicated to DR. FOURNIER, in recognition of the eminent Parisian's researches in the field in which the author is a worker.

SEXUAL IMPOTENCE IN THE MALE AND FEMALE. By WM. A. HAMMOND, M. D., Surgeon-General U. S. A. (retired list); Professor of Diseases of the Mind and Nervous System at the New York Post-Graduate Medical School, etc. Detroit: George S. Davis.

DR. HAMMOND explains that this book was written in the hopes of aiding his professional brethren in treating a disease that probably causes more unhappiness than any other disease with which mankind is afflicted. The book is made up almost entirely of cases which have occurred in the author's practice, and every form of impotance, both congenital and acquired, is dwelt upon and the proper treatment pointed out. The work is written in the vigorous, clear and entertaining style for which all of DR. HAMMOND'S literary efforts are noted, and is as entertaing in the manner as it is instructive in the matter with which it deals. A subject of vital importance to material and moral happiness is cleverly handled. The volume is neatly printed and bound.

ELEMENTS OF BOTANY. By EDSON S. BASTIN, A. M., F. R. M. S., Professor of Botany, Materia Medica and Microscopy in the Chicago College of Pharmacy. 8 vo., 282 pages. Price $2.50: G. P. Englehard & Company, Chicago. 1887.

This work is very nicely written, the style being concise, and the cuts, of which there are 450, are well executed from drawings by the author. There are too many books of to-day on botany that are designed for students who have already made much advancement in this study; but few of these works are well adapted to beginners. To the latter class this book is well suited, as it is easy of comprehension, and each chapter is taken up in such a progressive way that it at once awakens in the reader an interest to know more as he advances in this beautiful science.

Therapeutic Brevities.

DISTILLED WATER NOT GOOD FOR EYE LOTIONS.—An English oculist having noticed that eye lotions made with distilled water were more irritable than when ordinary water was used, found, in further trial, that the irritation was still greater when the distilled water alone was applied. The simple explanation of this was that well or spring water contains salts in solution which make it slightly alkaline, thus rendering it somewhat more neutral to the conjunctiva, a tissue ordinarily bathed in the lachrymal secretion, which contains about one per cent. of solids, chiefly chloride of sodium. The addition of two and a half grains of this salt to the ounce of distilled water renders any lotion for the eye more soothing.—*Druggists' Circular.*

TREATMENT OF BURNS.—For burns of the first degree a dressing of cotton batting dipped in acetate of alumina is advised; for burns of the second or third degree, iodoform is preferred over all other topical applications. The iodoform is best used as a paste:

℞ White earth, 30 grammes.
Linseed or olive oil, 30 grammes.
Subacetate of lead, 02 grammes.
Iodoform, 8 to 16 grammes.

Mix first the earth and the oil, apply the paste with a spatula and cover with gutta percha tissue and absorbent cotton, retaining with a muslin bandage.—*Journal de Méd. de Paris.*

SALICYLATE OF SODA IN ORCHITIS.—The Bulletin Géneral de Therap. says that in gonorrhœal orchitis salicylate of soda causes in a few hours at first diminution and finally complete cessation of pain. Its action is especially constant in acute cases of epididymitis, with vaginalite. When inflammation of the cord predominates the medication is often without effect. In cases thus treated resolution of the swelling begins sooner than in cases treated antiphlogistically. It follows a regular course and it may be completed in less than eight to ten days, leaving only slight induration of the epididymis.

GLYCEROLE FOR VULVAR PRURITUS (P. Ménière d' Angers).—

℞ Oxide of zinc, 6 grammes.
Bromide of potass., 10 grammes.
Ext. Indian hemp, 2 grammes.
Glycerole of starch, 30 grammes.
M.

The application of this glycerole should be preceded by very hot lotions of flax seed. When the pruritus is accompanied by acne the author prescribes morning and evening soft black soap applied for half an hour, then lotions of black tea applied as hot as possible. —*L'Union Medicale.*

TONSILLITIS.—Let the patient wet his forefinger and dip it into powdered bicarbonate of soda. The surface of the tonsils should be rubbed with the end of this finger every five minutes during half an hour, afterwards every hour during the same day. Three applications a day are then sufficient. The author since adopting this treatment, has not had to lance a single inflamed tonsil.—*Lyon Médical.*

Medical Progress.

MacCormac on Abdominal Section for the Treatment of Intra-Peritoneal Injury.—Sir Wm. MacCormac, whose personal experience of military surgery in the great Franco-Prussian war of 1870, whose sound and detailed knowledge of antiseptic practice, and whose recent brilliant successes in two cases of intra-peritoneal rupture of the urinary bladder, mark him out as peculiarly well qualified to deal with the subject, has recently delivered an oration before the Medical Society of London, with the title at the head of this article.

In his introductory observation he quotes the words of Helmholtz that "medicine indeed has become young again, and endowed with fresh and greatly enhanced powers of doing good by dipping in the youth-springs of the natural sciences." He then goes on to pay to Lister that tribute which no true apostle or modern surgery withholds from the man who has shown us the key to it.

After mentioning that Mr. Walsham has recently had a successful case of suture of an intra-peritoneal rent in the urinary bladder, Sir Wm. MacCormac describes a case of suture of the intestine by his colleague, Mr. Croft.

A man, aet. 34, jumped upon in a public house row; great pain; sickness. Hospital after seventeen hours. Operation in eighteen and a half hours. Temperature previously 130°. Median laparotomy. Ileum discovered ruptured transversely in two-thirds of its circumference. Lacerations of mesentery and omentum. Fæcal extravasation. Septic peritonitis. Irrigation with warm 15 to 20 per cent. solution of boracic acid. Edges of intestinal rupture suture to margin of parietal wound. Operation lasted one and a half hours. Collapsed state. Ultimate recovery, but no strength or flesh regained. "Irrepressible escape of intestinal contents at the artificial anus."

At end of a month a second operation. Bowel separated from abdominal parietes, and opening in it closed with Lembert's suture. Operation lasted two and a quarter hours. Death thirteen hours after operation. "The suturing had been perfect and the peritoneum was entirely free of any recent exudation or inflammatory products."

Another case is mentioned in which Mr. Mackellar, for a gunshot injury of the sigmoid flexure, recently opened the abdominal cavity, but found it impraticable to apply Lembert's suture to the intestinal perforations caused by the bullet. "The patient was in a state of impending collapse at the time of the operation, and died twelve hours afterwards."

Still a recent case is given in which a young man never rallied after his ruptured spleen had been excised (by Mr. Croft).

Though MacCormac writes of these as cases in which "success was nearly achieved," less sanguine and more cynical persons may regard them as instances of "failure completely achieved," as regards the radical measures of enterorraphy and splenectomy.

The first two cases, indeed, seem at first sight to lend countenance to John Bell's strong words concerning Benjamin Bell's recommendation of suture of wounded intestine. This is quoted (later on in the oration) by MacCormac, and runs as follow: "I have ventured to say that if there be in all surgery a work of supererogation it is this operation of sewing up a wounded gut. It is a dangerous and puerile conceit."

But reflection and careful study of the facts put forward by our author point to a different conclusion. So minute a percentage of cases of wounded intestine recover when left to nature that such treatment or want of it offers practically no hope. And though the cases operated on die, it seems almost always, on reading their hissory, that the operation is done too late. Perhaps this argument scarcely applies to Mr. Croft's first case, in which the enterorraphy was performed at the surgeon's leisure one month after the accident, but it does apply to his second, which was not brought to the hospital until twelve hours after the spleen had been ruptured.

The history of the subject is touched upon, and St. Croix, of Pennsylvania, Benjamin Travers, Jobert, Lembert, Gely, Amussat, Gross, Parkes, of Chicago, Senn, of Milwaukee, Dennis, of New York, and other operators, experimenters and other writers are duly referred to. The great rarity of penetrating wound of the abdomen without injury to the viscera is emphasized and various facts given in proof. "Larrey in his long career only observed one instance in which a ball penetrated the abdominal cavity without producing immediately serious results. and in this case the intestine was afterwards found to have been contused."

The most fatal complication of penetrating wounds of the abdomen is injury to the small intestine. Sword and bayonet wounds of the bowels are rarely met with even in time of war, but knife and dagger wounds are common in time of peace, especially it might be added, in certain localities. Their diagnosis is of prime importance, and, in the early stage, often a mere matter of conjecture. Tympanites, discharge of blood *per anum*, are valuable symptoms when present, but neither may appear directly after the injury. If the blood passed from the bowel be abundant, and show itself soon after the injury, it is a very valuable symptom. Emphysema, when it occurs in the wound-neighborhood, is said to be pathognomonic. Shock and pain vary so much in degree as to afford no useful guidance.

With regard to the advisability of probing, if precautions be taken to exclude septic influences, the thorough examination of the wound by the probe may determine its direction and extent, and if this fails to clearly establish the fact or otherwise of penetration, the wound should be enlarged and explored to its termination either in the parietes or more deeply. The important point to speedily determine is, whether the wound penetrates the abdominal cavity, and this is perhaps the most effective manner of ascertaining it.

To wait for peritonitis, etc., to confirm the diagnosis is a fatal mistake.

With regard to treatment, the choice lies between enterorraphy and the formation of an artificial anus by suturing the margins of the wound in the bowel to the skin. The latter course should always be avoided when possible. It is in the highest degree undesirable, and cer-

tainly in those case where the injury does not extend more than half way around the calibre of the tube, or where the convexity of the bowel is wounded, and probably in all cases where the mesenteric attachment is intact; and the same may be said where the bowel is ruptured by external violence. This practice gives the surgeon a false sense of security; he thinks if his sutures give way the patient may still recover, but the evidence is very strong that the risk of fœcal extravasation is less when the wound in the bowel is completely closed, and the gut at once returned to the abdominal cavity. The indications in those cases are not identical with those in strangulated hernia with gangrenous bowel.

Other objections to forming an artificial anus in cases of wounded intestine are: (1) That even if the operation succeed the surgeon's work will be only half done, and the artificial anus will have to be closed at a future time by separate operation. (2) Should the original injury be done to the upper part of the small intestine the patient may be starved or fatally weakened by the escape of nutriment.

Under the heading "Methods of Suture" three conditions are laid down as necessary to success: (1) Two adequately broad and sufficiently wide surfaces must be brought into contact. (2) The mucus membrane must be excluded, for when the needle passess through the whole thickness of the gut peritonitis generally ensues from leakage along the line of the thread. (3) Rapidity of execution is of extreme importance, and that form of suture is best which can be effectively applied in the shortest time. LEMBERT'S suture is recommended, with the warning not to draw the thread too tightly for fear of gangrene, and consequent failure to procure union. Experimentally, this has been found to be the most frequent cause of non-union. For cleansing the abdominal cavity MACCORMAC recommends irrigation with a 3-per-cent. solution of boracic acid at a temperature of 100°, with water previously boiled. Drainage tubes may be dispensed with when the operation is performed soon after an accident.

Gunshot wounds.—These, we are told, are far from being rare in civil practice, especially in America, where everyone carries a revolver, and often uses it on small provocation. It is rare for more than two convolutions to be wounded by one bullet, or for the intestine to be wounded in more than four places. It is also rare for fæces to appear in the external wound. The mucous membrane seldom or never blocks the perforation caused by the smallest bullet to an extent to prevent extravasation. Bloody stools is usually a late symptom, without practical importance in reference to operation.

Air in the abdominal cavity, emphysema around the wound, a larger escape of blood than the injury to the parietes would account for, are among the symptoms which will help to indicate intestinal injury. Hemorrhage is apt to be severe even when only small vessels are injured. The admission of air by abdominal section has a salutary effect, in tending to check the bleeding. Hemorrhage is the most frequent cause of death after gunshot wound of the abdomen. In the treatment of gunshot perforation of the intestines an exploratory abdominal section is strongly recommended, as soon as possible after the infliction of the injury. Every antiseptic precaution should be exercised. No hand but the operator's should ever be allowed to enter the abdominal cavity. The entire intestinal tract, as well as the stomache and other viscera, should be examined. When several openings exist close together resection of the portion involved is recommended. The fingers are considered better than the ingenious clamps which have been invented.

When a large piece of intestine requires removal, a triangular piece of mesentery may have to be excised. The mucous coat becomes everted. It should not be excised, as it gives support and supplies blood to the edges of the gut.

There is a triangular interval, filled with connective tissue and blood vessels, between the layers of the peritoneal coat, as it leaves the bowel to form the mesentery. At this place the needle must be passed deeply enough to include the mucous coat as well as the serous. Otherwise extravasation will result.

Abdominal injury without external wound.—The fatality of concealed lesions of the intestine is so great that the idea of intervention has occurred to many surgeons, and has several times been put in practice, but with invariably fatal results. The symptoms and indications for an operation are the profound shock, with persistent and intense pain, increased on pressure. The jijunum and ileum are the portions of the intestine most frequently ruptured, and the rent will generally be found just behind the part of the abdomen which has been struck.

The French troops in the Crimea lost one in every three. Of 95,615 Frenchmen who lost their lives only 10,240 perished at the hands of the enemy. As many more died in hospital from the effects of their wounds, so that the remainder, amounting to 75,000 men or more, were sacrificed to diseases for the most part preventable. During the American war 97,000 men died from wounds, just double the number, 184,000 perished from disease. During the Franco-German war the losses on the German side exceeded, for the first time in military history, those sacrificed by disease. In the older campaigns blood-poisoning caused the most fatal consequences to the wounded. In the last Egyptian campaign not a single man died from pyemia, septicæmia, erysipelas or hospital gangrene, a result unparalleled in the annals of war.—C. B. KEETLEY, M.D., London, Eng., in *Annals of Surgery.*

THE PROPHYLACTIC TREATMENT OF THE TEETH.—PROF. DR. MILLER, in the Pharmaceutische Central Halle, states the care of the teeth should not be deferred until the permanent teeth have appeared; it should rather be begun in earliest childhood.

The prophylactic treatment of the teeth has the object of preventing the appearance of caries and the further affections resulting therefrom.

Normal teeth, of all animal textures, show the greatest power of resisting decay, and it never occurs that teeth, removed from the oral cavity, are destroyed by decay, corruption or mould. Deprive the teeth, however, of the

salts of calcium, and the remaining organic fundamental substance, under proper conditions, and they proceed to rapid decay.

The cause of this withdrawal of the calcium of the teeth in the mouth, is the presence of acids, and such are formed by hydrates of carbon through fermentation. It matters not whether these hydrates of carbon consist of starch, cane sugar or grape sugar. By means of the ptyalin of the saliva, and the invertin of the oral fungi, starch and cane sugar are quickly converted into dextrine and fermentable forms of sugar (dextrose, lævulose) and the latter are then, by means of the oral fungi, decomposed into lactic acid with small quantities of side products.

The oral cavity, particularly if insufficient attention is paid to its cleansing, affords an unusually good soil for germ vegetation, and the number of fungi which under different conditions can there maintain themselves, is enormous. The author has up to the present day cultivated in a state of purity over fifty different kinds from the oral juices.

A large number of these oral fungi effect the division of hydrate of carbon, and thus assume their great importance in the origination of caries.

It is extremely worthy of note that the fermentative processes (formation of acid) do not take place freely in the mouth, but in recesses, fissures, spaces between the teeth, tooth cavities, etc.,—there where through deficient cleansing of the teeth, food remnants remain. This acid has an especially strong action at night, as it is not rinsed off, which is the case in the day-time, by eating, drinking and the saliva secretion.

These places, in which by the fermentation of food remnants a steady formation of acid takes place, are the originating points of caries, and special attention must be directed thereto in any effort to obviate the caries. The author terms them cariescentra.

From this portrayal of the origin of teeth-caries, it is readily discernable, that in the prophylactic treatment of the teeth, the means for cleansing stand in the first rank. Of these by far the most important is the tooth brush.

Such cariescentra (inter-spaces) as cannot be reached by the brush, we should seek to free from the food remnants by the tooth-pick or with a waxed silk thread, which should be repeatedly drawn through the teeth.

The author does not ascribe any special worth to tooth powder as a tooth-cleansing agent. To be sure, the visible external surfaces, especially of the front teeth, can thereby be rendered, whiter, but the cariescentra are often obstructed, rather than cleansed, by tooth powder, particularly if it contains insoluble ingredients.

Tooth soaps are somewhat more desirable for the purpose, insofar as they dissolve fatty constituents without attacking the teeth, and perhaps facilitate the penetration of the bristles of the brush into the cariescentra. Prepared from neutral soaps, they should exhibit neutral or slightly alkaline reaction. Under all circumstances, however, the thorough application of the brush is the most substantial.

The following are mentioned as well esteemed tooth powders and tooth soaps:

℞ Calcar carb. præc., 120.
Cort. chin. fusc., 60.
Conch. præp., 60.
Pulv. myrrh, 30.
Pulv. carophyll, 15.
Ol. cinnam, gtt. 10-15.
M. extract. f. pulv.

℞ Calc. carb. præc., 120.
Rhiz. irid. florent., 60.
Oss. sep. pulv., 30.
Sacch. alb., 30.
Natr. bicarb., 15.
Ol. rosæ gtt. v.
M. extract. f. pulv.

℞ Magnes carbon.
Rhiz. irid. florent.
Talci.
Sap. medicat. ää, 5.00.
Ol. menth. pip. gtt. x.
Mucilag. gum. arab. q. s. u. f.
Massa. tooth-soap.

℞ Calc. carb. præc., 100.
Pulv. rhiz. irid flor., 5.
Oss. sep. pulv., 4.
Sacch. alb., 2.
Myrrh. pulv., 2.
Mel. et glycerine, ää, q. s. ut. f.
Pasta.

As explained above, the steady action of the acid which is formed by the fermentation of hydrate of carbon in the cariescentra, in the course of time effects a withdrawal of the lime from the tooth texture, and leaves behind a cartillaginous, glue-yielding mass, which owes its further destruction to the mouth and tooth fungæ which gradually digest it, viz., dissolve it, producing a hole in the tooth.

This dissolution of the tooth texture, devoid of calcium, is not the result of one definite germ, but, on the contrary, every species of fungus occurring in the mouth, and possessing a pepsin-like, fermenting action, can aid the destructive process. For different reasons, therefore, the killing of the fungæ is of equal importance with the mechanical removal of the fermentable substances. For this purpose the antiseptic mouth-water is to be applied.

If a mouth wash is to be serviceable, it is necessary above all that it should act promptly, and not only hold the destructive fungus vegetation in check, but also kill it. No oral liquid —and it may possess never such powerful properties for the checking of development—can therefore be of use if it be not capable of killing off the destructive germ cells, and indeed, within a minute, inasmuch as in the rinsing of the mouth, the water is rarely retained longer than one minute. In this respect the antiseptics exhibit great differences.

Hydrogen-peroxyde, which even in dilution of 1:8,000, prevents the development of germs, is useless as a mouth wash, because even a 5-per-cent. solution fails to kill the destructive germ cells after the lapse of fifteen minutes.

After an extended series of experiments, the author has determined on the following mixture, which in the form of a concentration to be applied in the oral cavity, kills the destructive fungoid cells in a minute—a property characterizing, so far as I know, no other mixture which can be used in the oral cavity without danger from its continuance:

℞ Acid. thymic., 0.25.
Acid. benzoic., 3.00
Tinct. eucalypt., 15.00.
Alcohol absol., 100.00.
Ol. gaultheriæ, gtt. 25.
Sive ol. menth. pip. gtt. xx.
M. D. S.—Tooth tincture.

The mouth wash is prepared by adding a tablespoonsul to a tumbler of water, causing marked turbidity. Rinse the mouth after each meal and, especially, at bed-time: and during the operation retain the water in the mouth at least a minute.

An antiseptic mouth-wash, given by SCHLENKER, consists of:

Thymol, 0.30.
Spirit cochlear,
Spirit meliss. comp., ää 30.00.
Tinct. ratanh., 10.00.

Ol. menth. pip., 0.50.
Ol. caryoph., 1.00.

Add 10 drops to a half glass of water.

Before the use of any mouth-wash, the caries-centra must be freed from obstructing food remnants, in order to secure any results; otherwise the agent will only slightly or not at all penetrate into them.

The acid reaction of the saliva, often observed, must be corrected by rinsing the mouth with alkaline liquid. Tne best is a diluted solution (1:100) of sodium bicarb. In the use also of mineral acids, chloride of iron, etc., furthermore, in so callee fruit-cures, attention, must be paid to the neutralization of the oral cavity. He who does not do this, hastens the danger of jnjury rather than benefit, from the treatment.

THE ABORTIVE TREATMENT OF FURUNCLES.—LOUIS HEITZMANN, M. D., in Med. Record says: Although the treatment of furuncles has received a great amount of attention, we must admit that it has been so far rather unsatisfactory. We have not been able to relieve the enormous painfulness at the commencement of the affection very quickly, nor has it been possible to materially shorten the course of the disease. A great many different remedies have been tried, but with no very encouraging results.

The causes of furuncles are, as is generally supposed, various, and it has become customary to divide them into idiopathic and symptomatic. The idiopathic furuncles are the results of different irritations to the skin; the symptomatic occur either in the course of general systemic derangements, or are the results of them. I believe it would be much better if we were to divide the causes into direct and indirect. The direct cause is the staphylococcus pyogenes aureus, which was first described as being present in furuncles by GARRÉ, about two years ago; the indirect ones are those mentioned above. Recent and most careful researches of several bacteriologists, especially of ROSENBACH and PASSET, have shown that, with the exception of only a very few substances, such as turpentine and mercury, neither mechanical or chemical irritants will produce suppuration without the presence at the same time, of micro-organisms Some authors deny even these exceptional cases, and say, "No suppuration without micro-organisms." Whether this axiom is correct or not we will not investigate here, but that the staphylococcus pyogenes aureus is the real cause of the furunculous inflammation has again recently been proven by an experiment of GARRÉ upon himself, in which he rubbed into the perfectly healthy skin of his arm several staphylococcus colonies taken from osteo myelitic pus, and these penetrating the excretory ducts of the cutaneous glands, produced furuncles in large number.

Before I discuss the treatment of boils, I would like to mention the so-called predisposition to furunculosis. It is taught in many, especially in American text-books, that a disposition to the formation of furuncles is more or less necessary. This view fortunately loses more and more adherents, and to-day there are probably few physicians who will doubt that furuncles can be formed without predisposition, even in the healthiest person. According to what was said above, it is sufficiently clear how boils originate, and why they are so often present in the course of itching or pustular skin-diseases, such as eczema, scabies, phthiriasis corporis, prurigo, or acne. The disposition, in connection with internal derangements, such as diabetes, tuberculosis, uræmia, etc., can also easily be explained, if we remember how easily vulnerable the skin is in such affections.

Taking into consideration such extremely different views in regard to the etiology of furuncles, we cannot be surprised that the internal treatment has been so various. It would lead too far were I to attempt to enumerate all the modes of treatment and medicines that have been used; and still, in spite of the great number, we cannot deny that we have so far not been able to prevent the formation of furuncles nor to abort them The simplest treatment at the commencement of the affection was the application of cold or moist heat, according to the effects in each individual case or the sensation of the patient, for the course can be shortened neither by the one nor by the other. Another, but certainly not very agreeable method, was the application of caustics, of which quite a number have been recommended, but more especially caustic potash and solid nitrate of silver. Paintings with tincture of iodine, sesquichlorate of iron, carbolic acid, the use of mercurial ointments, and a good many others were tried, but without the desired effect. LASSAR recommends scooping out at the very commencement of the disease; he uses small spoons, with which he opens and scoops out circumscribed suppurating cavities, especially furuncles. In 1873 HEUTER recommended parenchymatous injection and infusion of carbolic acid into inflamed tissues, but since this method was not specially recommended for furuncles, it was very soon forgotten till it was more recently again taken up by BIDDER[1] BIDDER uses injections of two per-cent. carbolic acid solution, and has successfully treated 100 cases. He makes several punctures according to the size of the furuncle, and says that the feelings of pain when the injections are made are, in most cases, only slight; he is especially careful to mention that the inflammatory infiltration disappears very quick-

ly, and that necrosis can easily be prevented if the injections are made early enough.

It must certainly be considered a great advance, that antiparasitics began to be used in the treatment of boils, but injections are not as advantageous as might be desired, for not only are they, according to the statements of a physician in whom they were made in a hazel-nut-sized furuncle, excessively painful, but it is also not possible to use them in every part of the body. It would, for instance, not be very easy to make an injection into the scalp, and it certainly would not be pleasant for the patient were they to be made into furuncles situated in the perineum or in the ear. Even where this method could be used for single furuncles, it would not be easy to apply it if numerous nodules were present; that is, in furunculosis.

After it was shown, some years ago, that micro-organisms are the actual causes of furuncles, it is rather surprising that parasiticides have not long ago been used in the local treatment of boils. It is well known that among the numerous parasiticides, salicylic acid often does excellent service in diseases of the skin, but in furuncles it has, to my knowledge, never been used. I therefore tried to abort furuncles with salicylic acid, plaster or salve, and the result was really surprising, for it acted beautifully. The first case in which it was used was that of a young man, who, for three weeks previously had suffered from a large number of boils of different sizes at the back of the neck. In spite of numerous incisions, new nodules appeared as soon as others were cured. The man suffered such pains that he was unable to sleep, and he could not turn his head in the slightest degree without most severe pains. When I saw him first, he had about one dozen larger and smaller elevated, indurated, inflammatory nodules on the left side of the back of the neck. I prescribed locally an eight-per-cent. salicylic-acid plaster:

℞ Acid. salicyl., ʒ ij.
Empl. saponat., ʒ ij.
Empl. diachyl. s. ʒ j.

When I again saw him, three days later, the pains had disappeared, he could move his head in every direction, and only a few superficial nodules remained; in three days more he was cured.

I had opportunity to test the action of salicylic acid in furuncles several times, and almost every time with the best success. If applied early enough, it never took longer than six or eight days to cure furuncles of even a large size and of long duration, and the relief to the patient was manifested in a very short time. It is immaterial whether the salicylic acid is used as a salve or in the form of a plaster, the effect is always the same, and a five to ten per cent. salicylic acid salve is of the same service. I use the officinal Unguentum aquæ rosæ as the basis of salves, not only because it has an agreeable, smell but because it is harmless, and this cannot always be said of vaseline, which is sometimes not free from sulphuric acid. A pleasant way to use the salicylic acid is in the form of the 10-per-cent. mull, which was first introduced by UNNA; it is used in the same way as the plaster, and causes a superficial formation of blisters, or a sloughing of the skin.

If, as I hope, the salicylic acid will prove as efficacious in other hands as it has in mine, we have a means to cure the furuncles every time as soon as they are formed, and, if applied early enough, necrosis will never set in. I have noticed that, if applied too late, no core will be found, but merely an accumulation of pus, which can be treated as a common abscess. If necrosis of the tissue is once present, salicylic acid will have no more effect, and the best thing then is to open the boil with a knife, and hasten the cure by application of the salicylic-acid salve. This treatment of furuncles is very simple, and is, I think, to be preferred to an injection. Whether this mode of treatment is also efficient in carbuncles and felons I do not know, for I have had no opportunity to use it in these. In all probability a favorable result will be seen even here, since salicylic acid first macerates the epidermis and then sloughens it, whereby it can quickly penetrate into the skin and kill the staphylococcus.

In conclusion, a few words about the general treatment of furunculosis and about the so-called furunculous diathesis. It cannot be denied that a badly nourished person or one weakened by disease offers, on account of the great irritability of the skin, a more favorable soil to the staphylococcus than a healthy individual, and an improvement of the general health, as far as it is in our power, is certainly indicated. The local treatment, however, is by all means more important in furunculosis than the general, since it gives immediate relief to the patient. I know of cases where a furunculosis, which had lasted for weeksand months, was cured by the local application of a one-per-cent. salicylic-acid salve. Special care must be taken that the salicylic acid is equally divided throughout the salve, and all the patient has to do is to apply it every morning and evening in a thin layer.—*Med. Record*, Aug. 6, 1887.

SOME CLINICAL OBSERVATIONS ON THE EFFECTS OF THE LATEST FEBRIFUGE, ACETPHENETIDINE.—THOMAS J. MAYS, M. D., in Med. News: The latest febrifuge has been brought to the notice of the profession in the Centralblatt für die medicinische Wissenschaften of February 26, 1887, by MESSRS. O. HINSBERG and A. KAST, under the name of acetphenetidine.

According to the Pharmaceutical Record (May 1, 1887), they obtained it from carbolic acid by the process of nitriting, separation of the arthro- and para-nitrophenols, acetylating the latter, reducing the π nitrophenol to π amedophenol, which is called phenetidin, and acetylating the phenetidin with glacial acetic acid, making the final product, acetphenetidine. It crystallizes in colorless needles, is slightly soluble in water, but dissolves in alcohol, and in glacial acetic acid. It is tasteless, and melts at 135° Celsius.

Their experiments on dogs with this agent showed that it was only in very large doses—from 45 to 75 grains—that it produced toxic symptoms. These consisted in accelerated respiration, somnolency, giddiness, vomiting, and cyanosis; and after having fully convinced themselves of its harmlessness in doses of from 15 to 30 grains per day, they essayed to test its action on fever in the human body. They gave it in the pyrexia of phthisis pulmonalis,

in doses of from 45 grains to 2 drachms, three times a day, and found that it gradually lowered the temperature without producing any untoward effects whatever. Its action is said not to be accompanied by any sudden dissipation of heat, or by any profuse hydrosis.

Shortly after the announcement of these results appeared, I had the pleasure of receiving a small amount of the drug through the kindness of MR. MERCK, with which I made a few observations in its relation to the fever temperature of pulmonary phthisis. The agent yielded some good results, but on account of the limited amount at my command, the test extended only over a few days, a period too short to arrive at any definite conclusion concerning the utility of the drug. The first was an acute case of phthisis, with an afternoon temperature of 105⅕° Fahrenheit, which was preceded by a chill. I gave her three grains of acetphenetidine every three hours. She had another chill the next day, and her afternoon temperature was 104°. The third day her temperature had sunk to 101° P. M., and she had no chill that day. The fourth day she had another chill, but her temperature only rose to 101⅕ P. M. The fifth day her temperature was down to 98°. Discontinued the acetphenetidine. On the sixth day she had no chill, but her temperature rose to 101° P. M. On the seventh day she had a chill, and her temperature rose to 103⅖° P. M. Began the acetphenetidine again. Ninth day, temperature 100⅘° P. M. Tenth day, 100⅖° P. M. At this point the supply became exhausted, but from even this limited experience with the drug it was quite obvious that it had a marked influence in depressing the temperature. Besides this her cough, appetite, and general condition seemed to mend.

The other was an old cavity case, with a temperature of 102° Fahrenheit P. M. He was given the same dose. Temperature, second day, 101⅖°. Third and fourth days, same. Fifth day, 100° P. M. This patient's expectoration and cough also seemed to improve while he was taking the medicine.

It is slower in its action than antipyrine or antifebrine, but probably on the whole safer. In order to obtain its best effects I think it should be given in a large dose at the outset, and then followed up with further doses in accordance with the demand of the supervening symptoms. It is worthy of investigation, and I shall give it a further trial in the near future.

KOLISCHER'S TREATMENT OF WHITE SWELLING.—At a recent meeting of the Imperial-Royal Society of Physicians, at which DR. KOLISCHER reported the results of his method of treating localized tubercular deposits, and showed patients who had been subjected to it at PROF. ALEERT'S clinic, the technical details of the procedure were explained by DR. KOLISCHER and DR. FREUND, the latter having worked up the chemical part. In cases of "fungi" which had not yet broken down, a corrosive-sublimate dressing was first applied to the part for twenty-four hours, and the surface was then disinfected with a one-per-cent. solution of sublimate. The injections were made with a Pravaz syringe of hard rubber furnished with platinized cannulæ, the syringe having been kept in a five-per-cent. solution of carbolic acid. The operation was only slightly painful, but severe pains came on some time afterward, and lasted for several hours. They were best combated by means of subcutaneous injections of morphine. An antiseptic dressing was applied immediately after the operation, and allowed to remain during the continuance of the fever of reaction, which was usually very severe and lasted from twelve to twenty-four hours. On the fifth or sixth day an immovable bandage was applied to the joint, and the stage of induration, shrinking, and perfect painlessness was attained in from three to six weeks; then massage and passive movements were resorted to for re-establishing the function of the joint. The cavities left after the fungous masses had been cast off were filled with gauze saturated with a solution of calcium phosphate. Cold abscesses were opened as freely as possible, and, without any curetting, tamponed with gauze prepared in the way above mentioned.

The following data concerning the composition of the solutions were given by DR. FREUND, who had worked in PROF. LUDWIG'S laboratory: The first was an acid solution of calcium phosphate, of the strength of about six and a half per cent., containing one one-thousandth part of free phosphoric acid (sterilized). This was for the injections. The second was a similar solution, but containing one one-hundredth part of free phosphoric acid (or two one hundredths for particularly torpid processes). This was for saturating the gauze.

The fungosities usually broke down and healed very rapidly after the operation, and any necrosed bone that might be present was expelled within a very short time. In cases accompanied with swollen lymphatic glands, KOLISCHER had observed also a systemic effect from the treatment. Among other instances, this was true of a case of tubercular affection of the mamma, in which, after the parenchymatous injections of calcium phosphate into the breast, the swelling of the lymphatic glands disappeared when the tubercular disease had been cured.

DR. KOLISCHER showed some patients who had been treated by the method successfully. Two of them had had fungous (tubercular) disease of the elbow joint, with great swelling, ankylosis, pain, and fever at the time of their admission into the hospital. Now, after six weeks' treatment with the injections, the joints were normal, even their mobility being almost complete. The fever and pain had disappeared very early in the treatment. He also showed a boy, four years old, who, in spite of very grave symptoms, such as ankylosis, lateral mobility, swelling, and pain, had recovered in the course of five weeks. The rapid and striking success which had attended the employment of the method was further illustrated by the cases of other patients shown at the same meeting.—*N. Y. Med. Journal.*

MEDICAL STUDENTS.—I have had it in my mind for some time to offer something on medical students. The editorial in the January World, "Shall I take a Student in my office?" revived the thought, and the following are some of the thoughts unvarnished: I believe the profession at large and

the professors of our medical colleges to be wholly responsible for the "innumerable numbers" of cheap recruits to the ranks that are annually pushed into the field. Some years since I was one of a class of three hundred students attending lectures at one of our standard medical colleges. One of the Professors during that term put into our hands a blank to fill out, which should indicate our literary standing; how many of us were graduates of literary colleges and held diplomas as B. S., or B. A.; and those who were not such graduates to indicate to what extent they had pursued the branches of text-book education in school or college. The result showed that most of us —not all of us—had studied grammar, arithmetic and geography.

Less than the "most of us" had studied rhetoric, algebra and latin. But few of us had completed a course in what is called a common school education, and but *seven* of us out of the three hundred were bachelors of science or art.

Over one hundred of that class (the writer was not included), were graduated, and received the degree of M. D. at the close of that year; made full and honored members of pre-eminently the "learned profession," in two terms of lectures of five months each. This same college is alive to-day, and is not a whit behind the majority of our medical colleges, either; and the "standing" of its students is but little improved.

I have an instance in my mind and know what I say to be true, of a man over forty-five years of age that graduated within the past five years from one of our reputable (?) medical colleges who never studied any of the rudimentary branches of a common school education, never attended school, and was never under tutorship out of school three months in his life. How did he do it? Easy enough. He had some money and "worked" the "professors." He gave one of them a horse and buggy, another a $70 microscope, courted (but never married) the sister-in-law of another, and so got through; and to-day he can't give the physiological action of three drugs in the materia medica. This same M. D. holds a certificate of the Illinois State Board of Health by reason of his "diploma" from a "reputable" medical college, and "practices" on the people of Illinois.—"MEDICUS," in *Medical World.*

DUJARDIN-BEAUMETZ ON THE THERAPEUTICAL USES OF THE WHITE NETTLE.—This plant (*lamium album*) was recommended long ago by ZACUTUS LUSITANICUS in the treatment of hæmoptysis; but, apart from the employment of an infusion of the flowers for leucorrhœa, the use of the plant has fallen altogether into abeyance. The juice of the nettle, in doses of from two to four drachms, has been used with some success in the treatment of metrorrhagia, and it is still used for this purpose in some countries, macerated in white wine. More recently FABER (of Schondorf) has obtained good results in diarrhœa and dysentery with an infusion of the seeds and tops of the *urtica diocia* and the *urtica urens*, and DR. ROTHE has recommended the alcoholic extract of the former as a hæmostatic. The plant is macerated in alcohol of 60° strength for a week, and cotton-wool dipped in the liquid is as efficacious in arresting hæmorrhage as the perchloride of iron. In a case of profuse metrorrhagia giving rise to serious apprehensions, in which all the usual remedies had failed, the administration of a white wine infusion of the plant by the nurse checked it at once. Since then DR. BEAUMETZ has used it a great deal, with the most satisfactory results. He has also succeeded in separating an alkaloid in the form of a sulphate, which he called sulphate of lamine. This drug does not appear to possess toxic properties, but, given subcutaneously, it has proved itself a powerful hæmostatic.—*London Med. Record*, July 15, 1887.

CHLORIDE OF METHYL IN NEURALGIA.—At a late regular meeting of the Societe Medical des Hôpitaux, M. DEBOVE made some remarks on the use of chloride of methyl in neuralgia. Since his last communication to the Society, in 1884, M. DEBOVE has treated one hundred and fifty cases of sciatica with this medicine, and found only one case in twenty that was not amenable to its action. Lumbago and neuralgia are cured by chloride of methyl almost instantaneously; in case of relapse, the pain easily gives way under its influence. Erythema should never be produced in treatment, the action should be rather superficial, and greatest number of nerve branches possible should be excited. Great precaution should be taken with patients affected with diabetes and albuminuria, and also with those patients whose skin is very irritable.

Out of eighteen cases of facial neuralgia sixteen were cured in this way. The medicament may be sprayed on to the face without inconvenience.—*Physician and Surgeon*, July, 1887.

PHOSPHORUS IN THE TREATMENT OF BRONCHO-PNEUMONIA.—FARIA (Brazil Med.; Lyon méd.) has made use of phosphorus successfully in the treatment of three children, from six months to six years old, who, in the course of attacks of broncho-pneumonia, were threatened with asphyxia, as shown by coldness of the extremities, cyanosis, and a very frequent and thready pulse. He gave from five to ten drops of the ethereal tincture of phosphorus in a draught of some cordial preparation. At the same time he used friction, sinapisms and inhalations of oxygen. He has not found this treatment successful with old persons.—*N. Y. Med. Journal.*

THE TREATMENT OF THE BITES OF INSECTS.—BERNBECK (Vereinsbl. pfälzer Aerzte; Alleg. med. Ctrl.-Ztg.; St. Petersburger med. Wochenschr.) gives these two formulæ:

(1.) Salicylic acid, 1 part;
Elastic collodion, 19 parts.
(2.) Corrosive sublimate, 1 part;
Elastic collodion, 1,000 parts.

On applying either of these solutions, the pain, it is stated, is allayed at once, and it is only in the rarest cases that the neighboring parts become swollen.

The Medical Age.

Vol. V. DETROIT, SEPT. 26, 1887. No. 18.

Original Articles.

IRRITATION OF THE SPINAL CORD.

BY J. W. CARHART, M. D., LAMPASAS, TEXAS.*

The subject of this paper is one upon which there seems to have been but little written, and what has been written appears to have elicited quite a difference of opinion, or else was allowed to pass, almost undiscussed and unobserved.

I hoped to find some definite and somewhat elaborate reference to the subject, in the fifth volume of Pepper's System of Medicine, but was disappointed.

The most elaborate and valuable treatise that I have met with upon the subject, is a monograph entitled "Spinal Irritation," by WILLIAM A. HAMMOND, M. D., which has been of service to me in formulating my thought for this paper.

My observations and notes, however, extend over a period of four or five years, and the subject has gradually taken shape in my mind as I have treated about forty cases of the malady in that time, and have suffered from it in my own person.

The existence of irritation of the spinal cord, as a distinct disease, is denied by a number of writers on diseases of the spinal cord, or of the nervous system. Several well-known writers, as VALLIEX, SKEY, and NIEMEYER, attribute the symptoms to hysteria.

In the nomenclature of the Royal College of Physicians, the disease is placed under the head of hysteria, if recognized at all.

But DR. HAMMOND says: "My own opinion is that there is a well-defined disease of the spinal cord, which, if designated by its pathology, may properly be called 'spinal irritation,' but which, in a system of nomenclature based upon morbid anatomy, would preferably be named 'spinal anæmia'."

BROWN-SEQUARD says: (QUAIN'S Dictionary of Medicine, p. 1499;) "Notwithstanding the doubts that have been entertained by many authorities, both British and foreign, spinal irritation is an affection which has a real existence and deserves a special name."

Terms employed.—Where distinctly recognized, various terms have, from time to time, been applied to the affection; the more common are Rachialgia, Neurasthenia and Spinal Irritation.

The disease defined.—AITKEN; (Science and Practice of Medicine, Vol. II, p. 104) says: "Spinal Irritation expresses all those conditions in which, without any mental affection and without any single nerve being definitely affected, there are sensations varying between cutaneous tenderness and acute pain approaching neuralgia in character, together with fixed tenderness of certain vertebræ on deep pressure."

FRANCIS MINOT, (in PEPPER'S System of Medicine, Vol. V, 749,) under the caption, Chronic Spinal Pachymeningitis, describes irritation of the spinal cord as follows: "The course of the disease may be divided into two stages: First, that of irritation of spinal nerves, with pain in the back part of the neck, extending to the head, and along the upper limbs. The pain is permanent, but liable to exacerbations, and is accompanied with stiffness of the neck, and a feeling of numbness and tingling, with muscular weakness of the arms."

BROWN-SEQUARD (Dictionary of Medicine, p. 1499,) says: That the affection is "chiefly characterized by a morbid excitability of the sensitive nerves of the spine, manifesting itself by spontaneous pains, and by tenderness under pressure, or when the affected parts are moved."

DR. AUSTIN FLINT, in his memoir on irritation of the spine considers the disorder as "giving rise to tenderness over the vertebral column, causing alterations of sensibility; as affecting the muscular system; as producing abnormal mental manifestations; as affecting the digestive organs, the heart and circulation, and as causing paroxysms of sinking."

Symptoms.—These are so varied that it would be impossible, in a paper like this, to present them all, nor can we expect to find all the symptoms of the disease embodied in a single case. In one case the central symptoms may predominate, and in another the peripheral. In the, nearly forty, cases that I have treated, no two presented exactly the same class of symptoms. One complained more of cerebral troubles, another of loss of power in the upper limbs, another of pain and loss of power in the lower limbs; whilst all complained, more or less, of a "distressed feeling in the back of the neck." A few had, themselves, discovered painful spinous processes, whilst, in most

* A paper read before the Texas Medical Association.

cases, they were unknown to the patient until discovered by my examination. In a few cases there were contractions of the muscles and spasms. In several cases there was nausea, particularly on pressure of the tender spots in the spine. In one case the tender spots were found in the whole length of the spine, and the limbs were contracted. In some cases there were found sore spots in the cervical, in others in the dorsal, or lumbar vertebræ. In every case the symptoms were aggravated by mental distress, worry or anger. There were, in various cases, disturbances of the functions of the heart, stomach, intestinal and genito-urinary organs.

Mary Putnam-Jacobi, M. D., in her case XXIV, reported in the Medical Record for October 9, 1886, under the heading: "Some Considerations on Hysteria," says: "The case is quoted here, not as an example of hysteria, but of a morbid state lying on the border-line of hysteria, but distinct from it," and she might have added, with propriety, as giving an example of spinal irritation. The leading features of the case are as follows: "From fifteen to twenty-eight engaged in excessive playing of the piano—sometimes from ten to twelve hours a day. Five years ago began to have distress in nape of the neck, and after a month, while playing on the piano, arms suddenly gave out. The patient was prostrated in bed for two months, and has never since been able to touch the piano. Even the placing the fingers on the keys, or on a table in the attitude of playing, causes sensations of the nausea and of distress at nape of neck. The same is caused by touching finger-tips, which are very sensitive. There is no pain in the track of the nerves; the morbid response to touch is felt immediately near the cervico-brachial plexus. There are often sensations of numbness in the right arm and occasionally pains. The act of turning the head or lifting the eyes causes nausea and even 'great anguish.' When the nape of the neck is supported, the patient feels perfectly comfortable. The head is the seat of many distressing sensations, though rarely of distinct pain It sometimes seems enormously big, sometimes perfectly empty. Inability for mental exertion marked. During the five years, the patient had been more or less subject to these symptoms, there had been many intervals of comparative health, but never of complete recovery." The etiology of this morbid state, in an excess of function, demanding complex muscular co-ordination, together with the predominance of symptoms of nausea and vertigo, and the degree of relief afforded when the back of the head was supported, all point to functional exhaustion, or, as I think, to what might have been expressed in the one word "anæmia" of the cord.

In many of my cases I have found the knee-jerk absent, in other cases it was present in an exaggerated degree. In my own person it was absent entirely for several years, but is now slowly returning. Brown-Sequard, Hammond, and others, claim that sore spots somewhere over the spinal column, are the true pathognomic, and never-absent sign of spinal irritation. I have never found it absent in my cases. We now come to the consideration of the causes of the disease. The causes of the disease demand special attention, as they stand so intimately related to treatment. The principal causes mentioned by the various authors that I have consulted, are excessive and prolonged mental exertion, sudden or great grief or fright (Hammond); over-sexual indulgence, masturbation, and the like, innutrition, anxiety of a prolonged and intense character, and further on I shall mention a cause which, in my judgment, was responsible for the largest number of the cases I have treated.

I quote the following from E. C. Spitzka, M. D., in vol. v, Pepper's System of Medicine, p. 901, under the caption, "The Treatment of Spinal Sclerosis," as bearing essentially upon the question of the causation of the irritation, although not so intended by the author. He says: "Ergot is recommended in sclerotic trouble, particularly tabes, by a large number of writers. Favorable results are reported as ensuing after its use in the early stages, particularly where signs of irritation preponderated, such as lightning-like pains, hyperæsthesia, and frequent erections; and it has been suggested that the beneficial action is due to an effect on the blood-vessels, which are supposed to be congested in the beginning of the disease. Proof of such congestion has not been furnished; the vessels are usually sclerosed and their lumen narrowed.

In view of the undeniable danger which attends the administration of ergot in tabes, it may be properly insisted that its indications be more precisely formulated than has yet been done. It is commonly noticed in the natural progress of tabes, that the lightning-like pains disappear, usually about the time the anæsthesia becomes greatest. The anatomical parallel is supposed to be the destruction of the nerve tubes, whose previous irritation caused these pains. If, as is claimed—and it seems to be substantiated—ergotin does produce amelioration of the lightning-like pains, it would prove a damaging revelation which showed that it did so in imitation of the natural process, that is by increasing the sclerosis."

I have made this somewhat lengthy quotation because of its bearing on the cause I shall assign for the most of my cases, and because the statements of the distinguished author are confirmed by the observations I have made.

Dr. Hammond, in his excellent monograph, p. 23, says: "The exciting cause of spinal irri-

tation is not always easy to ascertain. In 202 cases I could not, by the most careful inquiry, find any circumstances likely to have given it origin. In 206 it was manifestly produced by blows, falls, strains or excessive muscular labor; in 180 it was obviously and admittedly caused by sexual excesses, and in 57 by masturbation. In 21 it was apparently due to anxiety, grief, or other depressing emotions; in 15 to excessive mental application; in 15 to insufficient physical exercise; in 69 to innutritious and insufficient food; in 17 to the over-indulgence in the use of alcoholic liquors; in 1 to the excessive use of tobacco, and in 1 to the opium habit. In the remaining 208 cases it followed exhausting diseases, such as typhoid, scarlet, intermittent and remittent fevers, dysentery, diphtheria, cystitis, gonorrhœa, lucorrhœa, erysipelas, etc. I have never been able to satisfy myself of its ever resulting directly from syphilis. In general terms, it may be said that any cause capable of reducing the powers of the system may produce spinal irritation."

The older authors claimed that spinal irritation was inflammation, or the result of inflammation, and all their treatment was based upon this assumption. Modern writers claim, and truly without a doubt, that it is the result of the opposite condition, viz., anæmia of the cord. It is stated as a fact which my own observation and experience confirm, that the dorsal position affords relief to the patients suffering from spinal irritation, whilst it aggravates the suffering in inflammation of the cord. It is also found that irritation of the cord is relieved by such remedies as strychnia, phosphorus, and picrotoxine, which increase the amount of blood in the cord; whilst others, such as ergot and belladonna, which diminish the amount of blood in the cord, invariably aggravate the symptoms (HAMMOND).

Again, it may be noticed that inflammation of the cord is relieved by the upright position, and is aggravated by lying down; whilst spinal irritation is aggravated by the upright, and relieved by the recumbent posture. The disease prevails extensively in certain portions of Texas, more particularly in the rural districts. Most of the cases that have come under my observation, have been in this State. The large majority were females, but of a more advanced age than indicated by BROWN-SEQUARD. He says, "It occurs in girls chiefly between fifteen and twenty-five."

In one of my cases it was manifestly caused by snuff-dipping and the excessive use of morphine; in two cases by hard labor and over-sexual indulgence; in one by error of refraction of the eyes; in one by over-anxiety in business matters; in three by excessive mental labor. I have reason to believe that the large majority of my cases were caused by innutritious diet and ergotism. The injurious effects of ergot in tabes dorsalis, sclerosis and spinal irritation are admitted by all modern writers on diseases of the nervous system, among whom we may mention E. C. SPITZKA, M. D., Pepper's System of Medicine, Vol. 5, p. 901; WILLIAM A. HAMMOND, M. D., Spinal Irritation, p. 60; C. E. BROWN-SEQUARD, M. D., Quain's Dictionary of Medicine, p. 1502, the latter of whom, although he does not mention ergot as objectionable in these cases, impliedly teaches against it when he recommends remedies of the opposite class. He says: "The writer can easily accept the statement of some physicians that certain remedies, such as iron, alcoholic stimulants, cod-liver oil, arsenic, and nux vomica, have been used successfully against rachialgia. Indeed, some of these means—one or another, according to special circumstances—ought almost always to be used."

In studying my cases, I found that many of them had, what in this country are known as "sore shins," or ulcers of the legs, and that all of them were badly nourished; several of them were mothers nursing children from eighteen to twenty months old. I became satisfied that there was some common cause for complaint, in the diet or habits of the patients. I was not long in discovering that the bread used by most of them was made of cornmeal, and that the corn was not specially selected, and was ground at the town mill, where there was no "smutting" process employed. I also found that smut could generally be found about the tips of the ears of corn. When the corn was fed to the horses, these smutty tips were knocked off by most of the farmers, as they had learned that smutty corn gave their horses "blind staggers." It is now a well-recognized fact, that irritation of the cord is the result, not of inflammation but of anæmia, the effect of ergot is to produce anæmia, and hence, is accounted for the prevalence of sore shins and spinal irritation in Texas.

As to the pathology of spinal irritation, but little need be said in addition to allusions already made to it. Since the disease is not a fatal one, but few opportunities have been afforded for observation as to the condition of the cord, except where patients have died of some intercurrent malady.

So far as we are able to learn, no naked-eye lesions have been discovered in this affection, nor has the microscope aided in the least in their detection. The fact of anæmia, therefore, being the condition in irritation of the cord, is not as completely demonstrated as are the lesions in some other diseases of the cord; at the same time, when we take into account all the known facts, the case seems pretty clearly made out. Admitting that it is anæmia, all the pathological symptoms fall into line without any wrenching, whatever.

The theory of anæmia would locate the affection in the posterior columns of the cord. Lying between the posterior horn of gray matter and the posterior median fissure are to be found the posterior columns, which consist of white matter in their lateral halves. The columns of Goll lying on each side of the median fissure constitute one part, whilst the other part is composed of the posterior root-zones. These columns, according to the united testimony of all observers, have an intimate relationship with sensibility. It is true that some authors claim that the posterior columns have no sensibility of their own, but that does not affect the case, for, as DALTON teaches in his Human Physiology, edition 1882, p. 391, the posterior columns of the cord, when irritated by artificial stimulus, develop signs of sensibility. The immediate region of the posterior nerve-roots, seems to be the chief seat of sensation, whilst it is nearly absent in greatest distances from this point, next the median line. The sensibility of the posterior columns, then, is mostly due to the presence of posterior nerve-roots, many of which traverse the outer portions of these columns.

Pain is the chief feature of the irritation of the spinal cord. It is a well-recognized fact, that irritation of a nerve-center gives rise to pain in the parts supplied by the nerves proceeding from that center. Anæmia of the cord produces irritability of the cord. As the posterior columns are the seat of sensibility, it is a fair inference, if not a necessary conclusion that anæmia, resulting in irritation of the cord, affects mainly the posterior columns.

A few cases from my note-book will suffice for purposes of illustration:

Case 1. An unmarried woman, 38 years old. Saw her first in May, 1885. The disease was of long standing, and had produced contraction of the lower limbs. There were sore spots the whole length of the spine, and so exceedingly sensitive that, passing my fingers gently over them caused her to vomit. She was addicted to the inordinate use of strong coffee, snuff, and tobocco, and used opium when she could get it. She promised to abandon all these vices, if I would treat her, which I consented to do. She improved rapidly, and in a few weeks was able to get about on crutches, do plain sewing by hand and also run the sewing machine. She was subject, however, to recurrences of exacerbations of the malady, when she suffered of retention of urine, rendering the use of the catheter necessary, and she also suffered from constipation of the bowels and derangement of the heart's action.

Case 2. Mr. R., about 45 years old, rock-mason by trade, and accustomed to heavy lifting. Left kidney affected, sometimes pus in the urine. Came to me complaining of "distressed feeling in nape of the neck"—sometimes extending up the back of the head, making his head feel strangely; was fearful at times that he would go crazy." Very tender in region of medulla oblongata, and sore spots in lumbar vertebræ. Admitted over-sexual indulgence, functions of heart, liver, stomach and genito-urinary organs impaired. Unable to labor—badly nourished. Put him on treatment, sent him away from his family to visit friends, and improvement was rapid. Was nearly well when lost sight of.

Case 3. Mrs. M. about thirty years old. Has suffered three or four years with severe pain in nape of the neck, so that at times she was compelled to support it with the hand. Strong sunlight seemed to aggravate the symptoms. There were very sore spots in the cervical region, also in the region of the coccyx, which was injured some years before by accidently sitting down on an upright stick of stove-wood. She had been treated by several physicians, without benefit; there were symptoms of approaching paralysis, and her husband feared that she might become insane. She was treated for irritation of the cord, and at last accounts was in good health.

Case 4. Mr. S., merchant, has applied himself very closely to his business; first experienced uncomfortable sensations in the nape of the neck, which seemed to be relieved by support with the hand. Pain and weakness was soon experienced in the arms, and sometime after in the legs. Mental effort, as in book-keeping, etc., embarrassed. When examined, sore spots were found in the spine—tendo-patellar reflex absent. Patient rapidly lost flesh and strength, and was greatly distressed in mind about his condition. Was put upon treatment, and at last accounts was rapidly improving.

Treatment.—I soon learned, in my own case, that cold baths were inadmissible, and I invariably prescribed warm baths for my patients coming to Lampasas Springs for treatment. Warmth in any shape whether atmospheric or in the form of baths, is generally agreeable to patients suffering from any form of nervous affection, particularly irritation of the cord. Peripheral conditions are capable of modifying the functions and nutrition of the cord. "This," says SPITZKA, "is proven, not alone by a host of observations made on the spinal cord, but is also disastrously illustrated by the part played in surface chilling in the etiology of many acute and chronic diseases of the cord. Notwithstanding this latter, a large and influential body of German neurologists recommend cold baths and cold spinal douches in these affections. I have seen such excellent results from the use of warm baths that I am compelled to plead, in defense of my ignorance of the effects of cold ones, that I have never dared to use them. In numerous

cases the beneficial effect of a warm bath is almost instantaneous."

My attention was early called, in the treatment of spinal irritation, to the use of nitrate of silver, and I administered it in doses of from one-fourth to one-half grain, as recommended by the books. The symptoms were manifestly aggravated by the treatment. The fault was in the size of the dose. This accounts for the failure of so many in the treatment of this disease with nitrate of silver. SPITZKA says of its use in sclerosis: "The first drug to which an influence was assigned upon the sclerotic process, and which has maintained its reputation longest, is nitrate of silver. Its claim to being regarded as a remedy may be best characterized by the fact that an author who is far from being prejudiced against it, and who recognizes the claims of WUNDERLICH, its advocate, speaks of it as 'a valuable placebo.' I have never obtained any effects from this drug, in the sclerosis; or from the chloride of gold, which has been also recommended for these affections, nor have I seen any in cases where either or both had been faithfully tried by others for years." SPITZKA does not inform us as to the size of the doses used; but if he followed the formula as laid down by most authors on the subject, his doses were too large, and this may have accounted for the failure of the drug in his hands. I reduced the dose to one-eighth of a grain, and then to one-tenth grain, and with the happiest results both in my own case, and in the case of nearly all whom I have treated. It is not to be expected, of course, that in tabes dorsalis a cure could be effected by any means known to science. But it is altogether possible that, if taken in time, the disease might be arrested, by nitrate of silver, in one-tenth grain doses, together with tincture of iodine painted freely over the affected part.

This has substantially constituted my treatment of irritation of the spinal cord, with the addition of such other remedies, as nux vomica, arsenic, iron, etc., as circumstances seemed to indicate.

A REPORT OF THREE CASES OF RESECTION OF A PORTION OF THE ALIMENTARY CANAL.*

BY H. O. WALKER, M. D., DETROIT, MICH.

Case 1.—Charles H——, a baker, aged 48 years.

Family history.—Both father and mother had been healthy and lived to upwards of 70 years. There is no history of cancer, phthisis or scrofula in the family.

Previous history.—Always had good health until two or three years ago, when his appetite began to fail, with no appreciable loss of flesh. This condition continued up to about a year and a half ago, when he observed a sense of weight in the lower part of sacrum, and an occasional dull and aching pain in the lower portion of rectum.

In July, 1877, he had an attack of diarrhœa, with severe acute pain at every movement of the bowels. He also passed blood and pus at times.

These attacks of diarrhœa became more frequent, until three months before I saw him it had become a permanent affair, necessitating the use of the water-closet as often as 20 times in the 24 hours. Had been treated, more or less, all this time by various physicians for piles. In May, 1878, his physician, DR. J. H. CARSTENS, who suspected syphilitic or malignant disease, asked me to see the case with them. No history of syphilis could be ascertained; in fact, anti-syphilitic treatment brought about negative results. Putting the patient under an anæsthetic, we made a thorough examination.

External appearance.—Several rounded tumors varying in size from a filbert to a pea, were observable around the verge of the anus, simulating very much old external hemorrhoids with no ulcerated surface. The introduction of the finger found a continuation of these tumor-like projections, with more or less ulceration above the internal sphincter. The disease extended up anteriorly three inches, and posteriorly about four inches, with considerable of a constriction of the bowel, admitting with difficulty a SIMS' speculum. Our diagnosis was encephaloid cancer, as verified by the microscope. Treatment, only palliative. Iodoform suppositories give a certain amount of relief.

Reading an account of *Extirpatio Recti*, by W. H. VAN BUREN, M. D., in the Medical Record for July 13, 1878, I decided and recommended the same treatment in this case.

Aug. 10th, 1878. In the presence of the students of the Detroit Medical College and assisted by DRS. CARSTENS, FLINTERMANN, YEMANS, and ROBERTSON, of this city, I removed the lower portion of the rectum, as follows:

Placing the patient in the lithotomy position, examination revealed a decided progress of the disease, since the last examination, extending in front about four inches and behind fully five inches. The anterior wall of rectum was quite movable, while the posterior wall was adherent to the coccyx, apparently. The external incisions were elliptical, extending below to the lip of the coccyx, and about an inch above the verge of the anus, entirely encircling the diseased tissue. After cutting above the sphincters I enucleated the remaining portions with my fingers and the aid of blunt-pointed curved scissors. Being satisfied that all of the disease was enucleated and pulled down, an incision was made through the healthy part

*Read before the Detroit Medical and Library Ass'n.

of the gut, and by means of a silver suture, made fast at the median line above; then cutting off the remainder of the diseased portion, other sutures were introduced, stitching the healthy rectum to the integument. As it was necessary to remove a V-shaped piece from the posterior wall of the gut, no sutures were used at that point. All disease adhering to the lower part of coccyx was thoroughly removed with a pair of curved scissors. A perforated drainage tube was introduced behind the sutures and above the rectum, the ends coming out at the lower part of the external cut.

There was but little hemorrhage, and only the middle sacral artery had to be ligated. Time of operation, one hour and ten minutes. All instruments, sponges, ligatures, etc., used during the operation were taken from carbolized water. The wound was thoroughly washed out with carbolized water, and compresses of lint (carbolized) were applied with a T-bandage.

The patient passed a comfortable night, with slight nausea, the result of the anæsthetic. Aug. 11th. The wound was thoroughly irrigated with warm carbolated water at intervals of every 3 to 6 hours. 4 P. M. Temperature was 102½°, pulse 90. I would also add that five days previous to the operation the patient took sulph. quinine grs. v, three times a day, and which was continued for several days after the operation.

Aug. 12. Temp. 101°; pulse 88. Irrigation continued. Discharge becoming purulent.

Aug. 13. Temp. 99°; pulse 86. Treatment continued.

Aug. 14. Temp. 98½°; pulse 80. Treatment continued, with good generous diet.

On the tenth day succeeding the operation, some of the sutures pulled out and were removed. About the fifteenth day all the sutures were removed, the gut receding about an inch, with a healthy granulating surface everywhere apparent. The patient continued to gradually improve, and six weeks from the date of operation he was allowed to leave the hospital with the wound nearly healed, and able to care for himself.

Nov. 1, 1878, I made a careful examination and could not discover any evidence of return of the disease. A circular cicatricial band of half an inch in width just within the anal orifice, served the purpose very satisfactorily of a sphincter. He had very little trouble in controlling the bowel except when the fæces were lax, and as a matter of precaution he wore a small compress of oakum, kept in place with a T-bandage. He informed me that he was now working at his old trade, namely, that of baker, performing his duties as well as he ever did. His general health was good, and his weight had increased twenty odd pounds. I saw him at intervals until October of 1879, when he came to me complaining of pain in the region of the stomach with frequent vomiting. I did not see him again, but was informed that he died some months afterward with cancer of the stomach.

Case 2.—A Canadian Frenchman, aged 27, came under my care February 26th, 1880, at St. Mary's Hospital. When I first saw him he presented an extremely forlorn condition, with the following history. Six days previous, while calling upon his sweetheart, his hernia, right (direct) inguinal, which had existed for four years, and readily kept in place by a truss, came down, and, owing to the situation, he did not reduce it. On attempting reduction several hours afterwards, he found it impossible. He remained in this condition for several days, when he sent for Dr. Charles E. Casgrain, of Windsor, Ontario, who directed him to be sent to the hospital. When brought into the amphitheatre his temperature was 103½°, pulse 130, and delirious; so much so that we were unable to get from him at the time an intelligent history of his case. In the right groin there was an immense black swelling extending well up the abdominal wall and down into the scrotum. I learned from him afterward, that for two or three days previous to his entering the hospital he had vomited considerable (stercoraceous, evidently, from his description). The case was anything but inviting. Using ether as an anesthetic, I proceeded to operate, first drawing off with an aspirator over a pint of fœtid serous fluid. I made no attempt at reduction by manipulation, but proceeded at once by an incision of several inches in length to lay open the parts. On reaching the intestine, it gave way, discharging a quantity of fœcal matter. The whole of the cæcal convexity was sphacelated, which I removed. After cutting the constriction and removing all necrosed tissue in the vicinity, which was considerable, I stitched to the abdominal wound the ends of the colon and ileum leaving the ilio-cæcal valve in view at the opening of the wound, through which the fœcal discharges, afterwards took place.

The after-treatment consisted in constant irrigation of the wound with carbolated water, by means of a rubber siphon. I provided for keeping my patient dry, by means of a large sheet of oiled silk, with an opening made through it large enough to expose the wound, and fastening it near its edges with sticking salve. By this means I succeeded in keeping the wound clean. The recovery was tedious, and the patient became very much emaciated although he received large quantities of nourishment in the way of milk, eggs, and beef. It will be remembered that the function of the alimentary canal was entirely cut off below the ilio-cæcal valve.

May 1st, 1880, I attempted to close the opening, by uniting the ends of the colon and ileum,

but failed. I then resorted to the method of the late DR. WM. A. BYRD, of Quincy, Illinois, and described by him in the Philadelphia Medical and Surgical Reporter for October 25, 1879, which consists first, in destroying the eperon with a steel wire enterotome shaped like a pair of tongs, with the blades fenestrated. I introduced one blade of the enterotome into the colon, and the other into the ileum for about three inches, holding them in apposition by strong rubber bands. On the fourth day following the introduction of the enterotome there was a free evacuation from the rectum—this being the first that had occurred since his entrance to the hospital. On the sixth day I removed the enterotome. From this time on the evacuations were all from the rectum, with exception of a small quantity occasionally from the ilio-cæcal opening. June 2nd, I partially succeeded in closing the opening. The failure to do so entirely was due to the large amount of sloughing in the vicinity. The mucous membranes which exuded I destroyed by means of the thermo-cautery, and finally, the whole thing cicatrized. He left the hospital in July 1880 well and in good health. I heard from him three years ago, when he was reported to be performing the work of a farm hand.

Case 3.—MRS. C., aged 32, had a slight femoral hernia that existed for several years. I saw her first with DR. C. G. JENNINGS, June 20th, 1885. The night before the doctor had been called and treated her for what he deemed a simple case of diarrhœa and vomiting, no mention having been made to him of a hernia. In the morning, being no better, he made a through examination and discovered a slight femoral hernia about the size of a walnut. He made considerable effort to reduce it but failed. In the afternoon, I saw her with him, we again attempted reduction (the patient anæsthetized) but failed. We explained to them the seriousness of the case and the necessity of surgical interference. But they refused, wishing to wait awhile. Ice was ordered to be applied constantly to the swelling. The next morning we were sent for again, when the family consented to an operation, which I did, assisted by DRS. JENNINGS and E. WRIGHT. Cutting down and opening the sac a knuckle of ileum protruded about the size of a walnut; it was partially gangrenous. The constriction was divided and the intestines sufficiently drawn forward to expose the healthy portion.

After excising the gangrenous portion, about an inch and a half in length, I hesitated whether to make an artificial anus or coapt the resected ends with catgut. Hesitation, undoubtedly, in this case caused the death of my patient, yet I am free to confess that my knowledge and practice of antisepsis in this case was bad. I united the divided ends with the continuous suture of catgut and returned the bowel into the abdomen.

The patient seemed to do well for forty-eight hours (the temperature about 100°) when general septic peritonitis set in, and she died on the fourth day after the operation. An autopsy was not permitted.

Surgeons are not agreed as to the advisability of excising a portion of the rectum for cancer—it is generally condemned. I have been chief assistant at a number of such operations, and they all died within a few days, or as many weeks, although my case might be, according to DR. KELSEY, classed as a "literary curiosity." I shall not hesitate to give my patient the benefit of an operation in this class of cases, for if the operation does not kill the patient, it certainly does make life more tolerable as long as the patient lives.

The conclusions to be deduced from the report of case No. 2 would be that I did the best that could be done for my patient under the circumstances. Any attempt at union of the resected ends would have been disastrous, owing to the large amount of necrosed tissue. I would have certainly had septic infection that I could not have controlled. I feel confident, that had my antiseptic precautions been perfect in case 3, that the results would have been different.

33 Lafayette ave.

(*Editorial Correspondence.*)

INTERNATIONAL MEDICAL CONGRESS.

The Ninth International Medical Congress convened at Washington, D. C., in Albaugh's Opera House, at 11 A. M. of September 5th. The session was formally opened by GROVER CLEVELAND, President of the United States, who, after congratulating the country on the presence at the capital of so many of those who had distinguished themselves in the science of medicine, declared the Congress open for organization, whereupon DR. H. H. SMITH, chairman of the Executive Committee, presented the list of officers which had been determined on. This list contained the name of DR. N. S. DAVIS, of Chicago, as President, and the nomination was unanimously confirmed. DR. DAVIS thereupon took the chair and the names of upwards of eighty gentlemen from different parts of the world were read as those of the vice-presidents. DR. J. B. HAMILTON was mentioned as Secretary-General, with a corps of associates, and the various other officers, and the chairmen of sections were the same as those previously published. A delegate raised the question of the propriety of appointing as vice-presidents gentlemen who were not in attendance, but the chair declared the question ill-timed, and the list was confirmed in its entirety.

The Secretary-General submitted his report, which consisted of a very brief history of the Congress from its inception. Its reference to the unfortunate *faux pas* at the start, was very nicely done, and was calculated to cause the slightest possible irritation of an old sore.

Dr. A. Y. P. Garnett, chairman of the local committee of arrangements, presented his programme for the social entertainment of the delegates and their families. It included a reception by President Cleveland and wife, a conversazione and a buffet banquet at the Pension office, and receptions by citizens.

Thomas F. Bayard, Secretary of State, then delivered an address of welcome, in the course of which he dwelt on the cosmopolitan tendency of science. Under its influence the banks of geographical prejudice are slowly wearing away, and with the growth of the spirit of common brotherhood, mutuality and interdependence which is peculiarly its, the word "stranger" is disappearing from the vocabulary of civilization. If letters be a republic, science is surely a democracy whose domain is penetrated and traversed by no royal road. As an American, he was proud to welcome the foreign delegates to a country whose advancement in science has been due to the individual efforts of its citizens, unaided by government patronage. The noble equities of our political system permit no invidious bar to the highest level of material success and public usefulness. He recognized the Congress as the guardians of the sanitation of the nations, and members of the noblest school of human usefulness. On the results of their efforts depends largely the answer to the question "Is life worth living?" The magnanimity of the profession was also referred to, and the beauty of the reward which comes in the "still small voice of gratitude" eloquently and touchingly descanted on. (This part of the address was very warmly applauded). The Secretary had at some time, and in some way, become impressed with the beauty of the *vis medicatrix naturæ*, and made a plea in its behalf, the point of which, made by a layman, was appreciated.

The Secretary's welcome was responded to by Inspector General Wm. L. Lloyd, R. N., in behalf of the profession of Great Britain; by Dr. Leon Le Fort, of Paris, for the French; by Dr. P. G. Unna, of Hamburgh, for Germany; by Senator M. Semmola, of Naples, for Italy; and by Dr. Charles Reyher, of St. Petersburg, for Russia.

The President, Dr. N. S. Davis, followed with his address. It opened with a tribute to the memory of Austin Flint, who had been originally selected to preside over the Congress, but whom death had suddenly removed from the sphere of his great usefulness. Dr. Flint's private and professional character were both extolled and his eminence as an author referred to. Dr. Davis modestly expressed the sense of his inability to properly fill the high position to which the partiality of the executive committee had nominated him. The honor he regarded as second to none other of a temporal nature, as it had come neither by conquest nor hereditary influence, nor yet by partisan strife. On behalf of the American profession he welcomed the foreign brethren with open arms and warm hearts. He then dwelt on the beneficent objects which the profession hold ever in view, and enlarged on the magnanimity and altruism of the practitioners of medicine. The true physician must be a man of broad information, for in the practice of his calling there is no knowledge which may not at times be utilized. One great object which the Congress should have in view, is the inculcation of the necessity of such trained and systematic observation as will prevent the confusion of coincidences with effects, in fixing the value of any special course of treatment, or in determining the natural history of any particular disease. Proceeding he touched on the beneficial effect, which he expected would follow the meeting of so many medical men of different countries and conditions, in regard to developing a feeling of fraternity and unity of interest.

The address closed with a plea for the collective investigation of the topographical configuration and the climatic and social conditions of various countries and localities, and their effect in modifying the symptoms of the diseases common to all. The importance of such investigation was dwelt on at length, and the good which committees charged with the work in all local medical societies, could accomplish in this direction. Associated action, in the form of corporations, constitutes the characteristic and predominating power of the age in which we live, and the benefit which would accrue from its application to investigation in the channel indicated, was forcibly depicted.

The Congress then adjourned.

Tuesday, September 6th—Second Day.

The Congress was called to order, in general session, at 10 A. M., by the President.

Dr. Austin Flint, of New York, delivered an address on "Fever, its Causes, Mechanism, and Rational Treatment. He began by quoting from a work by Chossat, in 1843: "Inanition is a cause of death which marches in front and in silence in every disease in which alimentation is not a normal condition," and on this basis he constructed his address, the principal object of which was to show how the metamorphosis of matter involved in the normal production of animal heat is accomplished, how

the abnormal production of heat in fever, involving as it does, abnormal acting in the metamorphosis of tissue, may be restricted, and how abnormal destruction of tissue may be limited and repaired. His theory of fever is different from any heretofore advanced, chiefly in so far as it regards the disturbance as mainly due to the decreased elimination of water, which he holds to be an excrementitious matter when given off by the usual organs of elimination—the lungs, skin and kidneys. It is, he holds, a production of oxidation within the system. Its production may be influenced by alimentation, independently of the quantity of water introduced, and by muscular work. In so far as it is thus produced *de novo* it resembles carbonic acid gas, which aids it in its chief function, that of being a solvent. Produced by the union of oxygen with hydrogen, it behaves in the manner of production and elimination, like an excrementitious matter. Dr. Flint formulated his views as to the pathology of fever in the following propositions:

1. It is probable that the original cause of most, if not of all the essential fevers is a microörganism, different in character in different forms of fever.

This proposition is based upon bacteriological researches of recent date, especially with regard to typhoid fever.

2. Defining fever as an abnormal elevation in the general temperature of the body, the pyrexia is due to the following modifications in the normal heat-producing processes:

A. Oxidation of certain constituents of the tissue, probably by reason of the presence of microörganisms in the blood, is exaggerated independently of increased muscular work and without being compensated by a corresponding increase in the appropriation of nutritive material. This increased waste of tissue is represented by the excess of carbonic acid and urea excreted.

B. The part which the formation of water within the body plays in the production of heat is either suppressed or greatly diminished in prominence, together with the equalizing action of cutaneous transpiration.

This proposition is based upon clinical facts, which show an increased excretion of carbonic acid and urea and a diminished excretion of water in fevers, and upon experiments which show that muscular work, while it increases heat-production, increases the production of water.

3. Fever produces abnormal consumption of fat, with parenchymatous degenerations, for the following reasons:

A. The fat is consumed because it feeds the pyrexia more readily than do the other tissues of the body, and its consumption is the most important source of carbonic acid.

B. Parenchymatous degeneration of muscular tissue and of solid organs occur, chiefly because the abnormal transformations of these parts, which result in an excess of urea and which probably, also, contribute to the excess of carbonic acid, are not compensated by the appropriation of nutritive matters from the blood

C. It is well known that patients with unusual adipose or muscular development are likely to present a more intense pyrexia in fevers than are those whose adipose and muscular development is smaller.

Finally. An essential fever is an excessive production of heat in the body, induced by a special morbific agent or agents, and due to excessive oxidation, with destruction of the tissues of the body, and either a suppression or a considerable diminution in the production of water.

Dr. Flint's treatment of fever is a logical conclusion from his theory of its nature. The following propositions give it in very clear outline. Those bearing on the use of alcohol, will strike the reader as decidedly novel, but the argument from which they are deduced is well sustained:

1. Aside from the influence of complications and accidents, the ataxic symptoms in fevers, the intensity and persistence of which endanger life, are secondary to the fever and are usually proportionate to the elevation of temperature. These symptoms are ameliorated by measures of treatment directed to a reduction of the general temperature of the body.

2. The abstraction of heat by external cold and the reduction of temperature by antipyretics administered internally, without affecting the special cause of the fever, improve the symptoms which are secondary to the pyrexia.

3. In health, during a period of inanition, the consumption of the tissues in the production of animal heat, is in a measure saved by an increased production and excretion of water.

4. In fever, the effects of inanition, manifested by destruction and degeneration of tissues, are intensified by a deficient formation and excretion of water.

5. Alimentation in fever, the object of which is to retard and repair the destruction and degeneration of tissues and organs, is difficult mainly on account of derangements of the digestive organs; and this difficulty is to be met by the administration of articles of food easily digested or of articles in which the processes of digestion have been begun or are partly accomplished.

6. In the introduction of the hydrocarbons, which are important factors in the production of animal heat, alcohol presents a form of hydrocarbon which is promptly oxidized, and in which absorption can take place without preparation by digestion.

7. Precisely in so far as it is oxidized in the body, alcohol furnishes matter which is consumed in the excessive production of heat in fever, and saves destruction and degeneration of tissue.

8. The introduction of matters consumed in the production of heat in fever, diminishes rather than increases the intensity of the pyrexia.

9. As the oxidation of alcohol necessarily involves the formation of water and limits the destruction of tissue, its action in fever tends to restore the normal processes of heat-production, in which the formation of water plays an important part.

10. The great objects in the treatment of fever itself are to limit and reduce the pyrexia by direct and indirect means; to limit and repair destruction and degeneration of tissues and organs by alimentation; to provide matters for consumption in the abnormal production of heat; and thus to place the system in the most favorable condition for recuperation after the disease shall have run its course.

WEDNESDAY, SEPTEMBER 7TH—THIRD DAY.

The general session was opened by the President, who called DR. DURANTE, of Rome, Italy, to the chair, which he occupied during the delivery of the address by his compatriot, DR. MARIANO SEMMOLA, of Naples. The title of DR. SEMMOLA'S address was "The Experimental Method in Scientific Medicine." The address itself was a vigorous attack on the bacteriology of the day, which makes it fashionable, to attempt at least, to trace all the ills of human flesh to the entrance into the system of microbes—a special microbe for each disease—to which it is the duty of the scientific therapeutist to give battle. Bacteriology, DR. SEMMOLA held, has gone beyond its premises, beyond its point of start, and is an unworthy invasion in the field of evolution. He has found the air by analysis full of microbes, but as yet we possess no test as to their being injurious or harmless germs. We cannot ascertain correctly the soil in which microbes grow nor their mode of life, and hence one factor of the problem remains unknown. The claim of KLEBS to discriminate between a poisonous germ and a large family of non-poisonous germs seems unproven. Plants are edible in proportion to their cultivation and soil, not differing morphologically from their poisonous fellows: and if an analogous condition holds good with microbes, the reasoning of the bacteriological method is false. In disease where several microbes are present, we cannot discover which is the fatal one. Observers are too ready to assert that diseases following inoculations are produced by the germ; and the writer appealed to all lovers of truth to determine, if possible, which diseases are dependent upon inoculation and which are not. Who has seen malaria, or diphtheria, or any disease, in which it was proven that the disease depended upon the microbe? Rodents, ruminants, and some other living organisms, show predilection for anthrax; but the carnivora are exempt from many diseases caused by germs. DAVAINE and KOCH failed in some attempts to transfer certain germs from one animal to another. What positive demonstration can they furnish of the causation of disease? Our physical and chemical knowledge of the blood of different animals is so small that we have no means of knowing what animal furnishes a suitable soil for the growth of these microbes. The chemmistry of the tissues of an animal is the true basis of judgment of its inoculability or non-inoculability by germs.

The dictum of modern therapeutics is, that remedies are given to destroy germs; but by the same reasoning mercury is given for syphilis and quinine for malarial fevers, while the direct existence of disease germs has not been proven in either case. The assertions of the modern school are proof of the injurious domination of a mistaken idea, and adherents of these theories imagine that they see in the patient the germs which they behold on looking through the microscope. The fact that solutions of bichloride of mercury in strengths of 1 to 1000 and 1 to 4000 are efficient germicides, proves nothing regarding their effect upon the germ of syphilis, for the following reasons: It is commonly thought that bichloride of mercury combines with the albumen of the tissues and their sodium salts, to form combined albuminates of mercury; and that these compounds act upon the albumen in the syphilitic germ, which is impossible when the mercury has exhausted its combining powers in its first combination. To avoid these contradictions pharmacologists form a hypothesis. If we admit that mercury kills syphilitic microbes. it does so in a solution of 1 to 5000. To combat successfully the germs of syphilis it would be necessary, by calculation of body-weight, to give a patient fifteen grains of bichloride of mercury, an amount which would be fatal in its results. Following this calculation, it would also be necessary to give at least sixty or eighty hypodermatic injections daily in the treatment of syphilis, representing in all from five to six grains of the bichloride of mercury. If we remember that after the third or fourth injection, traces of albuminates of mercury are found in the urine, we shall see that the whole amount necessary to complete the natural cure must be very great. Following the same reasoning, why should not mercuric chloride cure tuberculosis? There is no necessity for reviving a theory followed with such sad results. Empiricism has no place in the temple of medical science—it is a dead issue.

The true experimental philosophy, seeking the causes and acting from truth thus derived, has made its healthful influence felt not only in medicine, but in social science. To Americans the experimental method is that not only of science, but of their government and its institutions. With empirical anarchy we have nothing in common. The great facts of clinical observation transmitted through centuries are the precious basis of modern medical science. It is the duty of the physician, at present, to apply to these great stores of knowledge the clear light of the chemistry and physics of the present; its anatomy, pathology, and physiology, and thus to deduce rules of action for the investigation of new facts and new truths which arise in the clinical observations of today. In such a manner only can we hope worthily to contribute through an extended period of time, to the solid structure of truly scientific medicine.

Let us see to it that we adhere rigorously to the sound principles of correct observation, that we may avoid the errors of past ages and not stray from our onward path through the false light of erroneous hypothesis or extravagant generalization. Thought should be national in its true freedom and catholicity. Science knows no fatherland, and as long as it is fearless to conquer, will enlist under its banner the peoples of the earth. Each nation contributes characteristic studies to the accomplishment of the whole. To nations who look back to grand traditions, the remarks of Virchow, at the Congress of Naturalists at Hanover, in 1886, are particularly appropriate: "Science is unproductive when it has no national character," and that "Germany herself says that this scientific progress consists only in following her example—imitate no one if you wish to revive your science and reach your former grandeur." From no other corner of the earth could the writer's humble voice reecho more powerfully the history of his fatherland's experimental medical science than from America. Let us follow faithfully the banner of science, taking for our motto that message which the physician of the Egyptian army sent to Napoleon, "It is my duty to conserve and not to destroy."

After a unanimous vote of thanks to DR. SEMMOLA for his address, the Congress adjourned.

THURSDAY, SEPTEMBER 8TH—FOURTH DAY.

The Congress being called to order by the President, DR. A. Y. P. GARNETT, of Washington, introduced a resolution, which was unanimously adopted, endorsing an international celebration at Washington, D. C. in year 1892, of the 400th anniversary of the discovery of America by CHRISTOPHER COLUMBUS.

A committee composed a member from each of the countries represented in the Congress, was appointed to name the place of meeting of the next Congress.

The following was reported from the Section on Public and International Hygiene:

"After the reading by DR. DOMINGO FREIRE, of Rio Janeiro, representative in the Congress of the Brazilian Government, of a paper entitled 'Vaccination with the Attenuated Culture of the Microbe of Yellow Fever,' with demonstration of the microbe under the microscope, the following preamble and resolutions were adopted by the Section:

WHEREAS, Inoculation against yellow fever, if it prove successful after further examination, is calculated to benefit the human race throughout the world; and,

WHEREAS, The facts presented by the experiments of DOMINGO FREIRE afford a reasonable assurance of its protective influence in Rio Janeiro; therefore,

Resolved, That this Section recommends the co operative investigation of the results obtained by yellow fever inoculations as a protective against that disease, and that adequate appropriations by the governments presented in this Congress be made for that purpose.

Resolved, That this action be communicated forthwith for consideration in the general session of the Congress."

DR. P. G. UNNA, of Hamburg, Germany, then delivered, in German, a general address on "The Relations of Dermatology to General Medicine." It was a labored attempt to prove that a study of the skin and its diseases is essential to the highest degree of success in general medicine, embodying also an argument for specialism. Dermatology, it held, is, indeed, a young science, "not yet out of the stage of fermentation or never-ending reconstruction." Dermatologists long in vain for a place of rest. In the present stage of the science every important new fact arising in its field is liable to shake the entire fabric and remind us of its frailty. In no branch of medicine are the symptoms so readily observed, and in none are they so liable to be modified by constitutional and telluric conditions. Had the title of the paper been "A plea for a more thorough study of general medicine by the specialist" it would have been more descriptive of the address. A good point was made in recommending the skin as a medium for the exhibition of drugs with a view to the study of their physiological effects:

"Experiment on animals is not the only safe way to attain therapeutical knowledge. History teaches us quite a different road, viz., the bold external to the careful internal application. The internal application of mercury was dreaded in antiquity. Dioscorides admonishes us expressly against its use. But

when, at the end of the fifteenth century, with the appearance of syphilis, the mercurial ointment, cure became popular, and by laymen more than by physicians was profusely applied as a remedy, occasional and isolated applications of its internal use occurred. In the beginning of the sixteenth century, pills containing mercury and turpentine, of the pirate HAYREDDIN, were in favor. At the end of the sixteenth century, with the mercurial ointment-cure approved by physicians, internal mercurial preparations were administered. The balsam preparations had certainly already made this passage from external to internal applications, in antiquity. Well, this way is open to us to-day.

In illustration, I will quote an example from my own practice. I was experimenting with a sulphur remedy, which has received the name of ichthyol among laymen, in different skin affections, and found, among others, that in diseases of a distinctly nervous nature—*e. g.*, in certain nervous eczemas—it produced surprisingly good results by external application; I also found, however, that in continued external application this good effect changed to the opposite, and the idea then suggested itself to apply it internally in these affections; here I found its effect constant and satisfactory; it appeared that the domain of the application of ichthyol, with respect to skin diseases, agrees partly with that of arsenic, but disagrees for the most part. In further experiment it surprised me as well as the patient, that certain complications of this eczema, especially nervous bronchial asthma, likewise disappeared under the use of ichthyol. Was it not natural when, later, other cases of bronchial asthma, not combined with eczema, were treated in the same manner, and the good results justified this supposition, that I considered ichthyol as one of our best remedies in bronchial asthma in general, and place it at the side of iodide of potassium. In a similar manner I have, proceeding from the skin, found the good qualities of this remedy—known to physicians—in chronic catarrhs of the stomach and intestines, and in chlorosis.

There is, therefore, an innocent, safe way for therapeutical experiments, which are not performed on the body of an animal, but the human skin, and as this tissue is, under proper treatment, very tolerant, I anticipate a large series of therapeutical acquisitions gained in this way. I expect not less beneficial effects from progressive dermatology or the future of surgery. Our specialty is properly situated between internal medicine and surgery, and bridges the wide chasm of both; sharing with internal medicine the gain of therapeutical effect, with surgery more the benefit of immediate diagnosis."

The speaker complimented the profession of the United States on the attention which it is giving to dermatology. Nowhere, he said, are so many chairs occupied by eminent savants in this branch as here in the United States, and yet the means for real progress in our specialty are not sufficient. The objects are so manifold, too confusing, too difficult for one individual, the extent of preliminary sciences to be acquired too extensive. Quite different results would be attained here by an association of investigators pursuing the same object, by a condensation of scientific means and methods, as they can be found only at a scientific central institution.

FRIDAY, SEPTEMBER 9th.—FIFTH DAY.

The Congress was called to order by the President at 10 A. M. DR. J. B. HAMILTON reported from the Committee appointed to name the place for the holding of the next International Medical Congress, that Berlin had been selected as the place, and 1890 as the year. The report was adopted without dissent.

The Section on Military and Naval Surgery and Medicine reported resolutions, which were adopted, advising the adoption of a uniform method of reporting cases of sickness and injury occurring in the armies and navies of the world.

The following preamble and resolution were transmitted from the section on Public and International Hygiene:

"WHEREAS, The whole community has been shocked by the almost daily occurrence of terrible accidents on many of the railroads, causing considerable loss of life, and by the habitual neglect of the most elementary sanitary laws; and

WHEREAS, This Section considers itself, in a degree, the guardian of public health; be it

Resolved, That the attention of this Ninth International Medical Congress be respectfully called to this most important question, and that it be requested to use its influence to obtain the necessary reforms."

DR. CHARLES D. C. PHILLIPS, of London, was called to the chair during the reading of the general address by G. FIELDING BLANDFORD. M. D., Oxon., F.R.C.P., Lond., late Lecturer on Mental Diseases at St. George's Hospital, London, England, on "The Treatment of Recent Cases of Insanity in Asylums and in Private Houses." The following resumé of this address we reproduce from the Medical Record's admirable report of the proceedings of the Congress:

The inquiry was limited to the treatment of recent insanity only, without reference to the care and maintenance of the chronic insane. Recent insanity in very many cases is a curable disorder. What mode of treatment, then, will afford the best prospect of recovery? Will the latter take place only under asylum super-

vision, or is there a fair chance of curing the sufferer in a house taken for the purpose, or the house of a medical man? For the great majority of patients asylum-treatment is the only available method, but there is a certain proportion of insane persons whom it is important to treat, if it be possible, outside of an asylum, to save them from the stigma of having been the inmates of one, as this may seriously damage their future prospects and position. Among females some may be of high rank, whose friends shrink from the publicity of certificates and asylum surroundings; some may be young girls at the outset of life; others young mothers whom and whose children it is desirable to save from the reminiscence of an asylum. Among men there are not a few to whom confinement in an asylum will certainly bring a loss of employment tantamount to ruin. A young man's future career may be marred by the same fact. It is, therefore, of importance to consider what mental disorders are likely to be transitory and capable of being treated in an ordinary house, or slight and free from danger to the patient and those about him, so that he may be able to live in such a house, or move from place to place under the charge of suitable companions.

The most transitory of all mental disorders are attacks of maniacal excitement, varying from undue elation and hilarity to very acute mania. The most frequent cases are those caused by drink, varying from ordinary delirium tremens to other forms of insanity seen more especially in women. Very similar forms occur without any history of drink, in persons prone by inheritance to nerve-disturbance. They arise after a sudden shock of bad, or even good, news, or great fatigue, or other exhausting cause, and last a few hours, days, or weeks, the subsidence being often as rapid as the onset. The prognosis as regards recovery is often easy, the doubt being as to duration, and this will be solved by proper treatment.

Patients who are not actively excited or unduly elated, but depressed and melancholic, must be considered from a different point of view. They are more manageable at any rate in the less acute forms, but the disorder is more tedious, and treatment will have to continue for months rather than weeks or days. But many recover without asylum treatment, many without the aid of a specialist. As the commencement of this depression is almost always slow and insidious, treatment outside an asylum is likely to be adopted at first, so that there is an opportunity of considering how far such treatment is answering or likely to answer. The first objection to be urged against the keeping of a melancholic patient in a private house is the danger of suicide. That an ordinary house, with unguarded windows, staircases, and fireplaces, offers more facilities for suicide than an asylum is certain. But asylums do not afford absolute protection, as our commissioners' reports abundantly testify. Nothing will effectually prevent suicide but the unceasing vigilance of good attendants, and this, in many cases, can be applied as well out as in an asylum. One symptom which often necessitates removal to an asylum is obstinate refusal of food. When this is determined, and forcible feeding requires the aid of several assistants, it can hardly be carried out in a private house. Another reason why an asylum may be preferred is, that in an ordinary house or family the intense egotism so characteristic of melancholia is fostered rather than removed by the concentration of all upon the patient and his delusions. In an asylum, especially in a large one, he becomes a unit in the number of those treated, and this of itself is often highly beneficial. There is one more variety of insanity which can often be treated out of an asylum. This is acute primary *dementia*, or *stupor*, as it is sometimes called. These patients, though often very lost and idiotic, are seldom dangerous. With plenty of food, air, and exercise, they will get well in a private house, and as they are almost all young persons, it is an advantage that they should escape the asylum reputation.

For the treatment of all patients in private houses one thing is absolutely requisite, viz., funds. Unless proper medical supervision, proper attendants, and proper quarters can be provided and paid for, to an asylum the sufferer should go. Friends are often willing to make a sacrifice, and profess they will pay anything. But this may mean a scanty and poverty-stricken supply of what is necessasy, the funds become exhausted before recovery takes place, and then an asylum is necessary, and money is wasted which could hardly be spared. Where means are slender and the duration of the illness doubtful, it is better to send the patient to an asylum at once, and save the money for the convalescent stage. Treatment in a patient's own house is rarely successful, therefore the alternatives are an asylum, or a house adapted to the requirements of the case.

At the close of the address, which was listened to with marked attention, DR. A. CORDES, of Geneva, Switzerland, moved a vote of thanks to DR. BLANDFORD for his able and interesting address, which was seconded by DR. P. H. KRETZSCHMAR, of Brooklyn, N. Y., and then unanimously adopted.

The Congress then adjourned to meet at 9:30 A. M. on Saturday.

SATURDAY, SEPTEMBER 10TH—SIXTH DAY.

PRESIDENT DAVIS called the Congress to order at 9:30 A. M.

The Secretary-General transmitted from the section on Climatology a resolution recommending the establishment of a bureau of vital statistics; one from the Section on Military and

Naval Surgery and Medicine, protesting in the name of humanity against the use of explosive bullets in warfare; and one from the Section on Public and International Hygiene advising the teaching of hygiene in the public schools.

DR. GRAILY HEWITT prefaced the following resolution with remarks expressive of his gratitude for, and sense of appreciation of the hospitality which had been accorded him and the visitors from over the sea:

Resolved, On the part of the foreign visitors and officers of the Congress, that we desire to express to the President of the United States our best thanks for his presence at the ceremony of inauguration of this Congress: that we desire to express to the Executive Committee of the Congress, particularly to DR. HENRY H. SMITH, DR. JOHN B. HAMILTON, DR. A. Y. P. GARNETT, DR. TONER and DR. ARNOLD, our very high appreciation of the efforts they have made for the efficient organization, action and working of the Congress, which have resulted in so great a success, and that we would convey our warmest thanks to the citizens of Washington for the kind hospitality, both public and private, we have received during our pleasant visit to their beautiful city.

DR. MARTIN, of Berlin, seconded the resolution in a speech in German in which he expressed his thanks for courtesies bestowed. He confessed that he had come to this Congress with grave misgivings. These were, however, removed soon after the opening of the Congress, which would, in his opinion, take high rank among its predecessors.

DR. E. LANDOLT, of Paris, seconded the resolution in a speech in French, in which he stated that he had been commissioned to express in behalf of his compatriots in attendance, their profound gratitude to the President of the United States. The sanction given by PRESIDENT CLEVELAND had been the great charm of their visit to the Capital of this marvelous country, and they would take back to their sister Republic an increased feeling of kindliness for the manner in which they had been received, and an increased respect for the scientific attainments of this great country.

MR. EDMUND OWEN, of London, England, made a peculiarly happy speech in support of the resolution. He was very warm in his expression of regard for PRESIDENT CLEVELAND and his lovely wife. When Americans are in England, he said, it pleased the English to hear them say "we admire your Queen." He took the opportunity to say on behalf of his countrymen who had been in attendance on the Congress, and to say it in all truth and sincerity, "we admire and we love your Queen, for her beauty and for her grace," and hoped that she and her husband would long continue in health and strength to preside over a happy, a prosperous and a united country.

The Secretary-General warmed to the occasion and returned more thanks than he could express, to the foreign members especially, for their presence, their papers and their kindly words, all of which had contributed to the pronounced success of the Congress.

DR. N. S. DAVIS, President of the Congress, supplemented the expression of gratitude and thanks from the Secretary-General in a few well chosen remarks, and then declared the Ninth International Medical Congress adjourned, *sine die*.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., SEPT. 26, 1887.

Editorial.

THE INTERNATIONAL MEDICAL CONGRESS.

The memorable Ninth International Medical Congress, peculiarly memorable to the profession of this country, is finally a thing of the past. It is gone, but the record both of its inception and of its deeds, will live long in the medical history of the United States. In so far as it is possible for one man to judge, it was an apparent success, the conditions warranting this conclusion having presented to the necessary degree. The attendance of upwards of three hundred prominent, and many of them eminent, physicians from the Old World—Europe, Asia and Africa—furnished a sufficient tincture of the foreign element, and when combined with the attendance from cisatlantic countries it raised the list of those who participated in the deliberations of the Congress, to three thousand, in round numbers. On the score of size, therefore, the Congress was "equalled by few and excelled by none" of its predecessors.

Of the comparatively few papers which it was possible for one man, who is not omnipresent, to hear, some were superior on the score of merit and the rest were good, the degree of bad not being, in all justice, applicable to any, all being at least fully abreast of the times. The number of papers was such as to prevent the reading of all within the limits of the time allotted to the work of the various sections and, doubtless, many which were thus not read will be of such a nature as will greatly enrich the printed transactions in which they will appear.

The committees having in charge the arrangements and the provisions for the social entertainment of the visitors, aided by the attractions which Washington alone of the cities of this country affords, were successful beyond all that had been anticipated of their efforts, by the delegates from the "wild and woolly west" at least. Regardless of politics we venture to say that not a delegate who shook hands with Mrs. Cleveland, at the reception at the White House, but felt that he had

been entertained in a manner beside which the usual methods of entertaining (salads, oysters, ice-cream and crush) are stale, flat and unprofitable. There was a charm in our "first lady's" manner, a grace in her person and an indefinable something in the clasp of her good substantial right hand, which quite took off his feet every fellow who came under their influence, and the foreigners vied with her own subjects in declaring that with a single exception (their own wives and sweethearts, of course, in each case) she is the most charming as well as the most beautiful woman they had ever met. If no other entertainment than the meeting with her had been provided, the social feature of the Congress would have been a great success. It is true there was some grumbling, and some of our contemporaries have given prominence to some little hitches in the carrying out of the programme. This was not unexpected, however. It is the constitutional privilege of the great American, freeborn or naturalized, to grumble, and, indeed, with many no occasion is completely enjoyable which does not furnish an excuse for the exercise of this great privilege. But, seriously, we cannot but believe that those who grumbled at the slight defects in the carrying out of the admirably conceived and arranged plan for their social entertainment, went to Washington prepared to find fault. The only remarkable thing in their comments is that they have found so little to grumble at. The friendly-disposed found little difficulty in overlooking the little inconveniences which were, in a measure, unavoidable, and which even those who affected to be annoyed by them, would scarcely regard as intentional. The charity which the study and practice of medicine is calculated to engender and encourage occasionally slips a cog. Another peculiarity in the fault-finders with the carrying out of the social programme, is the fact that they are mainly of the class who have in the past objected to "junketing" as interfering with the scientific part of large gatherings of medical men.

The apparent success of the Congress having thus been as complete as we have attempted to indicate, the real success can only be adjudged from a study of the Transactions when they shall have been issued from the press, although the evidence is already sufficient to warrant the prediction that the assimilation by the profession of what was dispensed, will mark a very decided stride in modern medicine. Some may expect the Transactions to contain nothing with which they are already familiar. This, however, would be expecting too much, and, unquestionably, there will be an abundance of chaff with the kernels of true worth which will appear. Any meeting of medical men, at the present stage of progress in the science, would be short in its duration and its transactions ridiculously brief, which would confine itself to the absolutely new. Few men are, however, thoroughly familiar with the old, and as much good is frequently derived from a proper selec tion and presentation of what has been before presented, as from a consideration of what has been advanced for the first time.

It was feared that the alienation of the majority of those who have, by very common assent, been held as the leaders of professional thought, viz., the authors and teachers of the eastern medical centres, would embarrass the Congress and detract from its success, in so far at least as this success was dependent on contributions from the United States. The result, however, has demonstrated the baselessness of such a fear. While, doubtless, it is fair to assume that the cordial co-operation, sympathy and active assistance of these gentlemen would have been felt, the fact that they refused such aid stimulated to activity the large reserve force which has been wont to accord the gentlemen referred to undisputed leadership. The result was that the indifference and active opposition against which the Congress was obliged to contend, did no appreciable harm; they were, indeed, beneficial rather than otherwise, for without them the inherent strength of the profession as a whole would, in all probability, have been suffered to remain dormant. The lesson from this circumstance is one of more than passing importance. It is to the effect that the vast majority of the profession of this country is no longer provincial, and is no longer dependent on the medical centres, so called, for the guide to its path and the lamp to its feet. The great West, for instance, which has been held to be scarcely scientific enough to warrant recognition, and has been very much patronized by the Easterners, has shown its fitness to stand alone if need be. The somewhat ungainly young giant, driven to assert his independence has acquitted himself in a manner which will be found to have inspired him with a confidence which will resent more warmly than before, the patronizing treatment which he has been wont to receive. The South, too, has come handsomely to the front, and despite the reverses of a quarter of a century ago in the matter of its material prosperity, its representatives demonstrated to the assembled dignitaries of the medical world, their fitness to rank with them.

Another effect of the meeting of the Congress will be to give a better tone to the *esprit du corps* of the profession of this country. The showing made was highly creditable in comparison with that made by representatives from abroad, as the Transactions will show. The fact that the home delegates were not, in any sense, thrown in the shade by those from over the sea, had its influence, which was so decided as to be perceptible, even though it

cannot be accurately described. We venture to say, moreover, that the foreigners who may have come here expecting to astonish the natives, went home with different feelings. The American doctor suffers nothing in comparison with his foreign contemporary, and the recent meeting will have had the effect of disabusing the minds of many of some false impressions.

It was our design to have given our readers a synoptical report of the proceedings of the various sections of the Congress, but the attempt to do so within the limits of our space would necessitate so much abbreviation as to make the report practically valueless. We think the interests of our readers will be better subserved by reports of the proceedings of the general session, supplemented by synopses of the more valuable papers from time to time.

Therapeutic Brevities.

NITRATE OF SILVER IN THE TREATMENT OF GONORRHŒAL EPIDIDYMITIS.—M. DEBOUT (Normandie Méd.) recommends the constant application of a compress soaked in a 1-per-cent. solution of nitrate of silver to the scrotum on the affected side. If there is no relief in twelve hours, the strength of the solution may be doubled or tripled. No pain is produced, but the treatment can hardly be kept up more than five or six days, as an irritated state of the skin is then set up. The author thinks that the remedy does not act as a revulsive.

A NEW CURE FOR STUTTERING.—COEN (Ctrlbl. f. klin. Med.; Lyon méd.), acting on the principle that a stutterer does not stutter when he speaks in a low tone, advises the following course of treatment: Absolute silence for a preparatory period of eight or ten days; speaking only in a low tone for another period of the same number of days; and a gradual elevation of the voice during the next ten or fifteen days.

PAVESI'S HÆMOSTATIC.—The Gazette de Gynécologie gives the following formula:

℞ Sulphophenic acid,
Alcohol, each 25 parts.
Benzoic acid,
Tannic acid, each 5 parts.
Glycerin, 125 parts.
Rose-water, 200 parts.

The sulphophenic acid is made by digesting two parts of sulphuric acid and one part of carbolic acid together for a few minutes over a water-bath. The benzoic acid is dissolved in alcohol and glycerin, and the tannin in alcohol. For tamponing the vagina, M. CHÉRON recommends cotton soaked in this mixture. While it coagulates the blood perfectly, it does not act as an irritant.

THE TREATMENT OF PHTHIRIASIS PUBIS.—To kill the crab-louse (Jour. de méd. et de chir. pract.; Gaz. de gynécol.), it is better to use a 5-per-cent ointment of calomel than ordinary blue ointment. The following preparation, much used in Vienna, may be employed:

℞ Petroleum,
Balsam of Peru, each 15 parts.
Oil of laurel, 1 part.

This should be washed off after three hours. Another efficient method is to bathe the parts twice a day with a mixture of a teaspoonful of a 1-per-cent. alcoholic solution of corrosive sublimate and a pint of water. None of these applications kill the nits, but vinegar will, as it softens the adhesive chitin by which the ova are held on the hairs, when they should be detached.

A MIXTURE FOR FLATULENT DYSPEPSIA.—Lyon Médical, quoting from the Revue de Chirurgie et de Thérapeutique, gives this formula:

℞ Tincture of gentian,
Tincture of star-anise,
Tincture of nux vomica, each 8 parts.
Chloroform, 2 to 4 parts.

From eight to ten drops are to be taken before each meal in a wineglassful of water.

A MIXTURE FOR INFANTILE DIARRHŒA.—The Union Médicale credits ZINNIS with this formula:

℞ Fennel water, 75 parts.
Lime water, 6 parts.
Subnitrate of bismuth, 3 parts.
Syrup of orange flowers, 15 parts.

A teaspoonful is to be given every two hours to infants whose dejections are green and contain masses of undigested casein. Farinaceous food should be withheld.

AN ANTARTHRITIC COLLODION.—MONIN is credited by the Union Médicale with the following formula:

℞ Elastic collodion,
Sulphuric ether, each 15 parts.
Salicylic acid, 4 parts.
Morphine hydrochloride, 1 part.

In cases of gout of the great toe, this should be applied every hour. The pain soon ceases, it is said, the swelling subsides, and metastasis is not to be feared.—*New York Med. Journal.*

Medical Progress.

HINTS ON SOME POINTS IN EYE DISEASES OCCURRING IN CHILDREN.—"As the twig is bent so the tree is inclined," and living on a wind-swept coast, as we do in Liverpool, we are prepared to see our trees all swept and bent, and swayed towards the rising sun by the northwestern wind that blows over them, but we are not surprised occasionally to find, from some variations in the soil, or perhaps from the effects of a strong gale in an unusual quarter, if a few trees or individual branches have a twist in a direction quite opposed to the inclination of the majority. And those of us who are sufficiently philosophical to regard our child patients as something beyond creatures with a capacity for taking exanthemata and physic, may sometime pause in our routine duty of writing prescriptions, to consider how these human twigs may be fashioned by the prevailing influences that pass over their young and growing frames, and, furthermore, to note how brief but violent disturbances may lead to life-long ill-nutrition or disabilities.

Children's growth is fashioned by many influences, among which we may place first ancestral inheritance. Gout, rheumatism, syphilis, struma in the parents, all transmit certain proclivities to particular types of tissue change in the offspring, and, although fortunate surroundings may do much to mitigate an evil ancestry, it must be admitted that it takes almost as many, if not more, generations of careful living to make a non-gouty man from a gouty stock, as it does to make a gentleman from a clown. The children of gouty and rheumatic parents are subject to keratitis, to kerato-iritis or choroiditis, of strumous or corneal ulcers, and so forth. Again, a healthy stock may be modified by bad hygiene. No need to give instances of the artificial production of rickets, struma, anæmia, neurosis, and other depraved conditions that spring from under-feeding or over-feeding, lack of air, sunlight and exercise, or the baleful influence of that reiterated excitement which constitutes the miscalled amusement of the frivolous, or is regarded as education by the earnest, in the present day. All this is familiar in your mouth as household words, but I am not sure if we all duly consider how fatally injured an organ may be by a pause of only temporary duration; as a sapling partially uprooted by a southern gale may, when it becomes a tree, lean toward, and not away from, the prevailing north-west winds; how some event of merely passing significance as regards the general economy may spoil an organ for a lifetime. The entrance of a germ into the blood giving rise to pyrexia for a few weeks, and, leaving no trace of harm on the general constitution detectable by the most skillful physician, may by causing a temporary congregation of leucocytes in the corneal lymph channels, give rise to ulceration and cicatrization that shall effectually spoil the eyes as an optical instrument.

It is well for us if we do not aid erring nature in the processes of destruction at these times; if we do not by our misplaced remedies, convert the temporary into the permanent. This I fear is sometimes done, and the first illustration of the theses I have just sketched may be taken from the prescription book.

The tissue of the eyeball of all others most prone to inflammatory and destructive change in childhood, is the cornea,—the tissue of all others most intolerant of stimulating and astringent applications is the cornea. The main refractive surface of the eyeball is, by its extravascular position and its exposed situation, especially liable to destructive influences. But the signs of corneal disease are in their early stages not particularly obvious. Redness of the conjunctiva, on the other hand, is an outward and visible sign not easily passed over. Now, as a considerable proportion of corneal affections are either preceded or accompanied by redness of the conjunctiva,—and as conjunctivitis itself is characterized by redness, it is not surprising that a vast number of eyes that are red are supposed to be suffering from conjunctivitis, when, as a matter of fact, they are not.

In the old days some wiseacre discovered, or supposed he discovered, that a red eye treated with sulphate of zinc or alum, got well sooner than a red eye left to itself, and, consequently, all sorts of red eyes have now for decades been treated by astringents, to their great discomfort and sometimes lasting harm. Passing over ophthalmia neonatorum (a septic disease), it may be said that redness of the conjunctiva is seldom primary in young children; it either indicates corneal disease or defect, or an irritation that is liable to travel on to the cornea. If it be due to corneal disturbance, then the astringent prolongs and intensifies the mischief.

The symmetrical development of the cornea depends in a great measure on the symmetrical growth of the entire body, but there is also a local growth. If we all grew up in a perfectly equable bodily development, like Greek statues, we should have perfectly spherical corneæ, but, supposing in the most perfectly-developed cornea an abrasion of the epithelium at the margins occurs, suppose nitrate of silver is introduced into that abrasion, aggravating the ulcerative process, the symmetrical growth of that cornea will be disturbed, its lymph channels will be less patent at one portion of its circumference than another, its curvature will be modified, and the eye will become astigmatic.

Putting aside nebulæ and obvious injuries, I am convinced that the beginning of astigmatism, in a considerable number of cases, may be sought not in an asymmetrical development of the cranium, though that has its share, but in a temporary ulceration or infiltration of the cornea, which may pass away, leaving scarcely any visible sign of its existence.

The order of events is somewhat as follows: A marginal keratitis gives rise to a red eye, which is called conjunctivitis, and treated by nitrate of silver drops and a sulphate of zinc lotion. The inflammation of the cornea spreads more and more toward the centre, and when (perhaps owing to a fortunate intermission of the treatment) healing at length takes place, the channels on two sides of the cornea are narrowed, growth is no longer symmetrical, the eye becomes astigmatic—acuteness of vision is lowered—scarcely enough to attract attention, but sufficiently to throw additional strain on the accommodation. Education is begun; work induces hyperæmia of the conjunctiva or blepharitis (two common sequences of refractive errors), is again treated by astringents, and made worse. The child complains of head-

aches and inability to do his tasks, is given some rhubarb or punished for inattention, and finally is discovered to be astigmatic, and is condemned to spectacles for the rest of his life. The danger of visual impairment by more or less dense nebulæ, or by faulty curvature (which need not always be even regular) is in proportion to the severity of the infiltration or its duration. The aggravation of keratitis by astringents is sometimes so marked that a mere cessation of the treatment is the commencement of convalesence. The more we study the pathology of eye diseases, the less respect we have for astringents. Blepharitis, hordeola, hyperæmia of the conjunctiva, phlyctenular conjunctivitis, when recurrent, are generally associated with hypermetropia, and require convex glasses. All purulent or muco-purulent affections require antiseptics—boracic acid, dilute perchloride and cleanliness. The sulphates of zinc, of alum, of copper, nitrate of silver and acetate of lead may be banished from the nursery pharmacopœia. The good they effect at the best is but temporary, the evil they may leave or intensify may be permanent.

Let us pass to a general cause, temporary induration, giving rise to a localized ocular defect permanent in character. As a rule, fits occuring during the first dentition are not regarded as having any permanent effects. It is found, however, that a certain proportion of children who suffer from teething convulsions have zonular cataracts associated with a peculiar malformation of the permanent teeth about to be described. These cataracts often escape detection altogether, as the opacities are sometimes very slight, and only impair vision sufficiently to cause the child to be considered shortsighted. He sees more or less badly at a distance and holds his book close when reading, but he is able to rub on at school, and he may perhaps never be brought under the notice of a competent observer. Other cases, of course, are more pronounced, and the cataracts are dealt with by operation. The most curious association of this particular lenticular defect is with the permanent teeth. When zonular cataract is found with a history of infantile convulsions, we may expect to find the permanent teeth malformed; when zonular cataract is found without a history of fits, the teeth are likely to be well formed. The distinctive peculiarity of these teeth is the imperfection of the enamel. The dentine projects beyond the enamel edge like an overgrown schoolboy's legs through his trousers. Sometimes the enamel does not extend over more than a fourth of the surface of the tooth and the dentine projects like a flange. At other times the enamel covers the whole tooth, but toward the lingual edge there will be seen an irregular or horizontal groove, or a number of small holes like the worm holes in antique furniture. Not only well-marked convulsions, but a single slight fit or attack of crowing inspiration will be followed by this defect in the enamel. As the surface of the tooth is divided by a more or less well-marked line, above which the enamel may possibly be smooth, but below which the dentine or imperfect enamel exhibits a grooved, rough and honeycombed surface, having a rude resemblance to rocks fretted to a certain height by the intermittent action of the ocean tides, I have employed the term "tidal-mark tooth" in my teaching. The name is found to be sufficiently descriptive. It establishes the distinction from the notched and pegged tooth of congenital syphilis that is associated with keratitis and irido-choroiditis. Of course, the characteristics of both species of defects may be found united in the same individual, as the victims of congenital syphilis sometimes have fits and zonular cataracts. Occasionally the dentine projection from a tidal-mark tooth is broken off, leaving an apparently short tooth, with a concave border. This is liable to be mistaken for the syphilitic notch. But the tidal-mark tooth is not a pegged tooth within the limits of the extension of its enamel, whereas, the syphilitic tooth is pegged the whole extent of its corona and its enamel is complete.

Teeth in town dwellers are so liable to be misshapen that some little care is needful in deciding on the typical form that is due to a particular determining cause. An opportunity occasionally presents itself of studying the effect of the modifying cause uninfluenced by accidental circumstances, as when syphilis is engrafted on to an otherwise healthy stock, as in the following instance: A very healthy married couple begin by having two healthy children who reach the adult age perfect in every respect, the teeth being in every way (like the parents') admirably regular and well formed. While on a voyage the husband contracts syphilis. The elder children have well-formed teeth; those born after the accident have choroiditis, and the teeth are pegged and notched. The stock being originally healthy, the alteration in the form of the teeth may be taken to represent the effect of the specific poison unaffected by any other constitutional defect. The enamel was perfect. The relations between fits, tidal-mark teeth, and zonular cataracts is curious and interesting. My experience seems to teach me that if zonular cataracts are found with a history of fits, the tidal-mark teeth will certainly be developed; zonular cataracts without a history of fits are accompanied by well-formed teeth, and in many cases of infantile convulsions the subsequent injury to the teeth is seen, although there is no obvious injury to the lens. It has been surmised that this remarkable injury to the enamel is due to stomatitis caused by mercury administered for the sake of curing the fits. Putting aside the fact that the routine practitioner of the day is more likely to give bromide of potassium than gray powder in any form of fits, I have satisfied myself in certain cases that no mercurial has been given. Dentition is a process of accelerated local growth, in its essential character lying close to the narrow borderland that divides nutrition from inflammation. In a certain proportion of cases this borderland is over-stepped, and though the inflammation passes away with the eruption of the teeth, it is reasonable to suppose it leaves behind it a damaged enamel organ,* or perhaps it may be more correct to assume that the activity of the organ is lessened temporarily, probably we need not look beyond aberrant

*The grooves seen in the nails after exhausting illnesses have a somewhat similar significance. But the matrix of the nail is a permanent organ, and the growth of the nail is continuous, whereas the enamel organ is a temporary structure, and the tooth can be effected in its growth only during a very limited period.

nature for an explanation of of the failure in the formation of the enamel.

The pathology of the lenticular change is even more obscure. It has been surmised that the mechanical jarring of the convulsions may have caused slight separation of the layers of the lens. But zonular cataract occurs in a certain number of cases without fits (and, as above stated, without tidal-mark teeth), and we must look somewhat deeper. Heredity seems to be not without influence. In one case under observation I have noted where the mother had fits, tidal-mark teeth, and zonular cataracts, her daughter had zonular cataracts only. A certain proportion of cases are certainly rickety. Whether this is more than an accidental circumstance, I am not prepared to say. I have no means of judging whether rickety children are more prone than others of a perverted nutritional type, say of strumous stock or unhealthy surroundings, to teething convulsions. It may be they are; the intimate connection between the dental and ophthalmic divisions of the fifth in adult life is undoubted. All practical ophthalmic surgeons are acquainted with anomalous cases of amblyopia, asthenopia, and the elevation of intraocular tension due to dental irritation, and it is likely that a cause which may give rise to functional disturbance in adult tissues will inflict structural injury during the period of growth.

It has been already remarked that the lenticular opacity following teething convulsions is sometimes so slight as not to be suspected or even easily detected. There is a class of cases who suffer from asthenopia. The symptoms are pain in or above the eyes, neuralgia, headache, blepharitis, and vesicular conjunctivitis. Formerly, these cases would have been drugged with quinine, etc., etc., but nowadays every schoolboy knows that neuralgic headaches are due to faulty conditions of refraction, and spectacles are ordered. These cases, which I do not find described in books, differ from ordinary asthenopia, inasmuch as relief does not follow corrections of the refractive error. The vision may be very little below normal. On investigation we find the history of one or more fits, tidal-mark teeth, and if we examine the lens with a plane mirror and a pretty high convex, we may find one or two minute telltale dots. A small proportion of cases of rebellious asthenopia will be found to have this history and this apparently insignificant injury to the lens. The correction of small amounts of astigmatism often fails to give any relief, as the pain proceeds not so much from the inequality in the curvature of the cornea as in the inequality of the index of refraction in the lens. Here, then, we have a far-reaching sequence from a cause very temporarily manifested. First, difficult eruption of teeth, fits, impairment of the temporary enamel organ, injury to the growing lens; then, as a permanent legacy, opacity of the lens, ranging in a degree from complete cataract to a faint, scarcely perceptible opacity, amounting to little more than an annoyance in near work.—DR E. A. BROWNE in *Liverpool Medico-Chirurgical Journal.*

THE NITRITES IN DYSPNŒA.—In a clinical lecture on "Dyspnœa, especially the Dyspnœa of Asthma and Bronchitis," the writer states that his first observation was made in 1880 with the nitrite of amyl, given by inhalation in a case of asthma. Since then he has made frequent observations on the effect of nitrite of amyl, of ethyl, of nitrite of sodium, and of nitro-glycerin, the drugs being introduced into the stomach in several cases of severe asthmatic orthopnœa occurring during the night, remarkable alleviation, with coincident silencing of the râles previously abundant in the chest, were obtained.

In bronchitis accompanied with dyspnœa similar effects were also obtained. The dyspnœa was removed, and at the same time the previously existing dry râles disappeared. "Let me illustrate this action of nitrites in two patients suffering from bronchitis now placed before you. One of the patients has been in the ward for several weeks, and from previous experience I can confidently predict the changes that will occur. He has suffered at intervals during the last 15 years from bronchitis, the lungs are emphysematous, and his chief complaints at present are breathlessness and cough, with a rather adhesive and slightly frothy sputum of small quantity The other patient was admitted yesterday. Her cough originated four months ago from a severe wetting. You observe that she has very obvious dyspnœa, and the sputum which I show you is large in amount, watery, and contains much froth. Both patients are suffering at the moment from dyspnœa, and there is now associated with the dyspnœa an abundance of snoring, whistling and cooing râles. I now ask DR. JEFFCOAT to give to one patient four minims of nitrite of amyl in a little water, and to the other two minims of a one-per-cent. solution of nitroglycerin, also mixed with a little water; and the gentlemen who are auscultating will at once inform us of any change in the sounds which they hear, while I have asked the patients to announce the change which they experience in their sensations. It is only a very few minutes since the medicines have been given, and already you have heard, almost simultaneously, that silence prevails in the chests where before there was a continuous succession of sounds, and that both patients find that they no longer experience any dyspnœa.

The significance of the facts I have now brought before you is almost self-apparent. They appear to throw light upon the production of the dyspnœa of asthma, and in doing so to confirm the conclusion otherwise arrived at by BIERMER that the dyspnœa cannot find its chief explanation in spasm of the diaphragm. They appear also to show that this dyspnœa does not depend on suddenly produced and vanishing constrictions of the bronchial tubes, caused by swelling of a hyperæmic, herpetic, or urticaria-like character; for the means that have been successfully employed to control and terminate the dyspnœa are the very means which should, according to the theory which involves constrictions of this kind, be the most efficient for increasing and prolonging it. Relief of the dyspnœa and removal of the accompanying râles were simultaneously, or nearly simultaneously, produced by nitrites, whose action is to increase hyperæmia by dilating blood-vessels. As nitrites, however, lessen the contraction of non-striped muscle, it appears to follow that the râles which accompany the dyspnœa of asthma are produced by spasmodic

contractions of the bronchial muscles, that the dyspnœa is mainly the result of spasmodic constrictions of the bronchial tubes, and that therefore the old doctrine which attributes the asthmatic paroxysm to spasm of the bronchi is in all probability the correct doctrine. In reference to their bearing upon the dyspnœa of bronchitis we have these facts to assist us, that whenever rhonchi and sibillations accompanying dyspnœa were removed by nitrites, the dyspnœa was also removed or lessened; but when the rhonchi or sibillations were unaffected the dyspnœa was not appreciably lessened. It could not be expected that in all cases of bronchitis the administration of nitrites would be followed by complete relief of the dyspnœa and complete removol of the auscultatory phenomena. In this disease dyspnœa is sometimes produced by mucus or other inflammatory products accumulated in the bronchial tubes, and rhonchi are sometimes heard which are caused by a viscous condition of these accumulated products, and even by accumulations of a similar kind in the throat. In such cases nitrites fail to give complete relief, and they fail to silence abnormal sounds. That they should fail is a confirmation rather than a refutation of the opinion which I wish emphatically to state—that stenosis of the bronchi due to spasmodic contraction of the bronchial muscles is a frequent causes of the dyspnœa of ordinary bronchitis.

I have not obtained any facts that would justify the preference of any one of the nitrites because it possesses therapeutic advantages over the others in the treatment of asthma or bronchitis. I, however, give a preference to nitrite of sodium and to nitro-glycerin. They are both extremely stable, and they can readily be given in solution, either by the stomach or subcutaneous injection. When the volatile nitrites are given by inhalation the effects are only of brief duration, but when they are given by the stomach the effects are similar in their relatively prolonged duration to those of the non-volatile nitrites. Nitrite of amyl, nitrite of ethyl, nitrite of sodium, and nitro-glycerin have each proved successful in my observations in relieving the dyspnœa of asthma and bronchitis. I believe they do so by removing bronchial spasm, and the remarkable power they possess in doing this will probably lead to their being more largely used that heretofore. The observer has presented to him a patient in whose thorax a continuous succession of varying sounds is heard. Within a few minutes after a nitrite has been administered, the endless succession of noisy breath accompaniments gives place to an almost complete silence, in which only the subdued quiet of normal respiration is heard, and at the same time, what to us is of even greater interest and importance, the distress of dyspnœa, or, it may be, the intense suffering and anxiety of orthopnœa, is entirely removed."—THOS. R. FRASER, M. D., in *Lancet*.

ECZEMA PAPULOSA CONTAGIOSA, OR PRAIRIE ITCH.—Eczema is generally described in the text-books as a non-contagious affection of the skin; my two years' experience with this dermatosis, however, convinces me that the present eruption is contagious, and has been gradually propagated from one neighborhood to another, until we find it diffused, not only over some of the Southern, but also Eastern States. By a tacit understanding among the people of the invaded States, it has been named "the itch," *par excellence*, and on the prairies "the prairie itch;" but everywhere the symptoms, course, and *finale* of this affection seems to be the same.

What is the cause of the present contagious form?

Prior to the last, we had two very severe winters, something rather unusual in this latitude. People had to house and clothe themselves more carefully, and hygienic measures were generally grossly neglected among the lower classes, from whom the present affection received its first impetus. Wearing heavy flannels for weeks, and perhaps for a longer time, without proper ablutions and without frequent change of underclothing, must necessarily produce an irritation and congestion of the skin, which, sooner or later, assisted by the unavoidable scratching of the itching surface, will form an eczematous eruption, which, with all disregard to cleanliness, is destined to advance to other stages, and to contribute to the extension and persistence of the eruption. The clear yellow serum contained in the minute vesicles will, under these circumstances, undergo a change in its chemical nature that will undoubtedly favor the formation of parasites. This theory will probably explain the contagiousness of this affection. In all cases, the patients themselves could trace their affliction back to friends with whom they slept or whose clothes they wore. If our microscopists would investigate this matter, our doubts would soon be at rest.

Acting under the idea that our eczema papulosa was of a parasitic nature, I adapted my treatment accordingly, and met with great success.

Where the patients presented only an irritable and congested skin, *i.e.*, in the first stage, I merely ordered the patients to use inunctions with lye soap (sapo viridis would be better) all over the body at bedtime and in the morning to bathe with warm water. Blue mass, whenever needed; if not, then sulphate of magnesia, three drachms, in a wineglassful of water before breakfast. Continue the soap every other night; the salts every morning till well. This was generally sufficient to cure the first stage.

As soon as the vesicles appear upon a tense, swollen, and red surface, they soon increase in size and become filled with limpid serum. In mild cases and under appropriate treatment, the serum is absorbed, the vesicles dry up and form either thin crusts or scales, which soon fall off and leave the skin red and tender. In this stage I prescribe:

℞ Plumbi acetatis,
Acidi carbolici, ää ʒ iij.
Ext. belladonnæ fluid, f ʒ ss.
Glycerini, f ʒ iij.
Aquam, q. s. ad f ʒ x.

M. Sig.—Apply soft cloths moistened with this solution to the affected parts. When dry, moisten again and keep moist.

This soothing solution will act like a charm and subdue the severe itching and burning. Internally I prescribe:

℞ Magnesiæ sulphatis, ʒ iv.
Elixir. vitrioli, f ʒ ss
Tinct. gentianæ, f ʒ iij.
Aquam, q. s. ad f ℥ iij.

Sig.—A teaspoonful in wineglassful of water after each meal.

In anæmic cases I add ferri sulphatis, gr. xvj., to the above. This mixture will keep the contents of the bowels in a soluble state and disperse cutaneous congestion. It also acts as a mild tonic.

As soon as the vesicles burst the eruption becomes confluent, forms dark brown crusts, and leaves an unhealthy state of ulceration under it, I change the external treatment. The ichor in these cases is generally so irritating that under the crusts ulceration is deepening. Where I find crusts, I order poultices to remove them; but if already removed, I give my patients the following:

℞ Acidi carbolici, ʒ ij-iij.
Zinci oxidi, ʒ ij.
Cosmolini (vel vaselini), ℥ ij.

M. Ft. ungt.
Sig.—Anoint two or three times a day.

Sometimes I use the ungt. hydrarg. ammoniat. of the United States Dispensatory, with carbolic acid, and with equal success.

I continue the saline mixture, but should the patient need a bitter tonic, I prescribe elix. calisaya, strychnine, and iron.

In all cases I insist upon frequent ablutions and change of underclothing.—DR. H. J. WARMUTH, in *Nashville Med. News.*

COLD WATER TREATMENT OF TYPHOID.—The Journal of the American Medical Association for May 14th contains a full abstract of a lecture on Antipyresis and Antipyretic Methods by PROFESSOR ZIEMSSEN, director of the Medical Clinic of Munich, especially in regard to typhoid. The lecture is very interesting and earnest. It claims a high value for the treatment by baths, and expresses a hope that after the favorable results of active antipyresis, physicians will not lapse again into the therapeutic indifference of the Vienna School. Of all antipyretic measures ZIEMSSEN considers hydrotherapy the chief: first, because it combines in itself all the attributes of a remedial measure; and, secondly, because its action on the fevered organism may be varied to any degree. The benefit of such treatment is not confined to typhoid, but is also to be noticed in other febrile diseases, such as pneumonia, erysipelas, and acute phthisis. The cold and lukewarm baths act, he thinks, by cooling the blood at the periphery, the vital fluid being returned to the internal organs with an indescribably pleasant as well as beneficial effect. Sleep is favored. There is an improvement in digesting, so that the patient can be fed better. On the circulation the effect is to contract the peripheral vessels, the heart works more slowly, the vessels show an improved tension, dicrotism is decreased, and the elasticity elevation returns. The respiratory apparatus is excited by the peripheral irritation to deeper and slower movements, cough is more effective, and in this way bronchial obstructions and consequent atalectasis and catarrhal pneumonia are better avoided than by the impracticable advice to turn a fever patient on his side. ZIEMSSEN gives two or three statistics to show the effects of the cold and the lukewarm bath treatment respectively. He takes his illustration of the strictly cold bath from VOGL, physician to the Garrison Hospital at Munich. He gives (with a rectal temperature of 102.2° F.) a cold bath at 63.5°, lasting a quarter of an hour, about every three hours, winter and summer, in unheated rooms, with windows open day, night. This is bold treatment, and for soldiers (for the most part with young and picked lives), does well. There were only 52 deaths in 610 cases, or 5.4 per cent. MURCHISON gives the mortality of typhoid in the London Fever Hospital, after deducting cases which died within forty-eight hours of admission, at 18.82 per cent. ZIEMSSEN compares VOGL'S practice with strict cold water treatment, with NAUNYN'S, in a civil hospital, who, with an axillary temperature of 103.1°, taken every three hours, gives usually eight baths in twenty-four hours, generally between noon and midnight, at a not lower temperature than 72.5°. He divides baths into cold (72.5° to 81.5° F., duration, five to ten minutes); lukewarm (from 81.5° to 90.5°, ten to fifteen minutes) and warm (90.5° to 95°). The warm are given in the later stages in very active delirious patients with great restlessness and muscular weakness. By this treatment NAUNYN lost 10 of 145 cases, or 6.9 per cent., "certainly a favorable percentage." ZIEMSSEN himself says that for twenty years he has recommended, for private practice, the gradually-cooled bath. The patient is placed in a warm bath of 90.5° or 86°. The water is continually poured over him with hands or sponge. While this is being done, cold water is very slowly poured in at the foot of the bath tub, and the water reaches gradually a temperature of 77° or 72.5°, until the patient's teeth chatter, or he declares he can stand it no longer. He is then taken out and placed in a blanket previously warmed, and wrapped in it without being dried. In this he remains in the greatest comfort for fifteen minutes, is then rubbed dry, and allowed to sleep. ZIEMSSEN, like a wise physician, recommends the study of the peculiarities of individual cases. While lauding the bath treatment, he speaks respectfully of antipyretic drugs.—*Lancet.*

CALCIUM PHOSPHATE IN TUBERCULAR JOINT-DISEASES.—A new method of treatment of chronic tubercular joint-diseases has been proposed by DR. KOLISCHER (Wiener Medizinische Presse, No. 22, 1887), which is said to have given remarkable results in the cases in which it has been tried. The author of the method was led to its adoption by a consideration of certain cases of spontaneous cure of local tuberculosis by the calcification of the morbid product, or by the intercurrence of an intense inflammation from traumatic or septic causes, as after an articular fracture. His object was therefore twofold—to obtain calcification of the tuberculous product, and to excite an inflammation which would be substitutive to the tubercular process. This object he claims to have obtained by the injection at the seat of disease of a concentrated solution of the acid phosphate of calcium.

A few experiments sufficed to show that the best results were obtained when the solution contained an excess of phosphoric acid. The solution used for injection, prepared after a formula suggested by DR. FREUND, is made as follows: 75 grains of the neutral phosphate of calcium are dissolved in 12 drachms of water, and phosphoric acid is added slowly until a perfect solution is obtained; to this are added 9 minims of dilute phosphoric acid (Austrian Pharmacopœia) and water enough to make 3 ounces. The solution is sterilized by boiling. A second solution, prepared like the first, but containing 90 or 180 instead of 9 minims of dilute phosphoric acid, is used for impregnating the gauze for dressings.

The solution is thrown at several points into the fungoid mass, by means of a hard-rubber syringe armed with a platinum needle, and then a dressing of gauze impregnated with the second solution is applied. The pain, for a few hours, is very severe, and must be combatted with morphine. There is some fever for a few hours, and the inflammatory reaction lasts from four to seven days. At the end of from two to four weeks considerable induration of the parts is present, but this gradually disappears in the course of a few weeks more, and the joint resumes its normal contour. In those cases in which caseation is present the skin breaks, and there is considerable discharge for a time, but the opening gradually closes if the calcium-phosphate dressing is continued, and a firm cicatrix forms.

In a letter from Vienna to La Riforma Medica for July 2, 1887, DR. DEL TORRE writes that this method has already been tried in about two hundred cases, and the results obtained have been in the highest degree satisfactory. PROFESSOR ALBERT has also given it his emphatic approval, and speaks of it in enthusiastic terms. There can be no question that some such method, by which the long and tedious treatment of chronic joint-diseases may be hastened, is a thing to be desired, and it is to be hoped that the activity that is now shown by surgeons in this direction may be productive of fruit in the near future, even if KOLISCHER'S method does not come up to the high expectations of its author and his followers.—*Med. Record.*

SOME OF THE MEDICAL USES OF THYMOL.—Thymol, as is well known, is a stearoptene obtained from the Ptychotis Ajowan, and in small amount also from Thymus vulgaris. It occurs in large transparent crystals, is soluble in ether and alcohol. It has been employed chiefly as an antiseptic in surgery, and though used to some extent internally, its value in this respect is not as generally recognized as, perhaps, it ought to be.

It is said to be of considerable utility in catarrh of the bladder and also in diabetes mellitus, though its mode of action in this affection is not easy of explanation. It is in diarrhœa, however, that it has found its principal employment as an internal remedy. Three years ago, when the cholera was prevalent in Italy, Bozzolo endeavored to popularize the remedy by articles in the daily press, urging its general use in that disease. His recommendations were based purely on theoretical grounds, and whether they were acted upon, and, if so, what the results were, we are unable to learn. It has, however been used to some extent in the summer diarrhœa of children, with, it is said, considerable success.

In a recent monograph by DR V. MARTINI, of Vienna, entitled "The Efficacy of Thymol in Intestinal Disinfection" (Milan, 1887), an account is given of a number of experiments with thymol in intestinal disorders, in which its utility would appear to be clearly shown. The author regards the insolubility of this substance as perhaps the one quality which renders it of peculiar value in intestinal disinfection. This quality renders it possible to exhibit the drug in large doses without fear of producing toxic effects by reason of its absorption. It passes in great measure undissolved into the intestinal canal, and there exerts locally its powerful antiseptic action. DR. MARTINI reports *in extenso* nineteen cases of diarrhœa and dysentery in which thymol was used. The cases embraced chronic diarrhœa, diarrhœa from overeating, acute dysentery, the diarrhœa of phthisis, chronic dysentery, and the diarrhœa of teething children. In almost every case a cure was obtained in from two to twelve days, the only exception being the cases of chronic dysentery, in which no good results were obtained, except that the number of the evacuations was slightly reduced. In only one case, that of a debilitated child to whom very large doses had been given, were any toxic symptoms noted. This child had some delirium and sopor. In the case of adults the author gave from twenty grains to two drachms, in divided doses, in the twenty-four hours.

Thymol has also been used with success as an external application in eczema and psoriasis, and especially in burns. But of these external uses we need not speak, as it was to the alleged value of thymol as an internal disinfectant that we wished especially to refer. It may, however, be worth alluding to the fact that a solution of thymol, employed in the form of a mouth-wash and gargle, is very useful in destroying the odor of tobacco which remains in the breath after smoking.—*Med. Record.*

JAMAICA DOGWOOD (PISCIDIA ERYTHRINA) IN SLEEPLESSNESS OF THE INSANE.—I wish to call the attention of my colleagues to the above named drug, which up to this date has been only partially proved, but from what we already know of its effects, we may well regard it as one of the *desiderata* of the healing art. In one word, from what I have seen of its action, I regard it as both hypnotic and anodyne, and in a few well-defined cases may be employed as a reliable substitute for opium. In certain forms of psycho-neuroses, and in primary delusional insanity, certain phases and symptoms present themselves that can be alleviated by this remedy. I refer to the sleeplessness of the insane, something very difficult to control, as is well known, and acknowleged by all who are experienced in the treatment of this class of mental diseases. At this present time, we have in mind the case of an elderly lady that we are treating in private. This patient has had a mental trouble for months, has delusions, and is partially demented; she cannot sleep, and this condition has lasted so long that she has worn out all the members of her immediate

family from anxious watching. Many remedies were tried with indifferent and very unsatisfactory results, until I gave piscidia, which seems to have a most charming effect upon her.

The dose administered is twenty drops given at about 4 p.m., and a second dose of fifteen drops may be given about an hour and a half after. I have used the fluid extract, as prepared by Parke, Davis & Co., Detroit, who first called the attention of the profession to its virtues. In one other case of mental disease, monomania with sleeplessness, it quieted the patient, and gave refreshing sleep. In hopeless cases of phthisis pulmonalis in the last stages, it may be given, and I have found it to produce rest and sleep, being sedative in its action, and alleviating the cough. In a case of troublesome thoracic neuralgia, where many remedies were administered judiciously, but without relief, this medicine relieved the patient of his pains, and in time a cure was the result. I can also refer to a case of neuralgia of the face and eye, that recurred in spite of the best treatment, that was greatly palliated, and finally cured by the piscidia, given in doses of from 25 to 30 drops. In one case of neuralgia of the cœliac plexus, this remedy seems to have a good effect, and I think is benefiting the patient.

I may add, that all the cases that I have quoted, were refractory examples, where ordinary remedies failed to do much good, so that I can well regard the Jamaica dogwood as a "desideratum," and at least worthy of further trial and study.—T. Griswold Comstock, M.D., in *N. Y. Med. Times.*

Fluid Extract Eucalyptus Globulus Locally in Diphtheria.—April 7th I was called in consultation to see a child of two years of age suffering with a severe attack of diphtheria. It had been sick for some time and was certainly a very serious case, its condition seeming to fully warrant the very unfavorable prognosis of the attending physician. Finding that the usual remedies had been carefully selected and faithfully applied, was unable to suggest any change, except the use, locally, of the fluid extract eucalyptus globulus, which Prof. Jay had strongly recommended in a conversation that I had with him some months before, especially indorsing it as used in a very critical case occurring in the practice of H. B. Laflin, M.D., of La Crosse, with a recovery where improvement seemed to be almost beyond belief. The patient improved quite rapidly under the use of the fluid extract, full strength, until the 10th inst., at which time, owing to the failure of the atomizer to produce a spray, and in the enforced absence of the attending physician at the bedside of a very critical case, the remedy was discontinued as unnecessary. On Monday the 11th inst., the child was much worse, and the following day I saw it again. Symptoms of diphtheritic croup were present, and the child was worse than on the first visit. We strongly censured the failure to continue to use the eucalyptus as ordered and insisted on its immediate use as before, hoping to once more benefit the patient by it, but fearing that it was too late. In forty-eight hours the case was much improved, and in a few days convalescent, eventually making a perfect recovery. Of course the patient was carefully nourished, receiving as large quantities of warm milk as he could be induced to take, and received stimulants in quantities and at times as seemed best suited to his condition. There was no break in this part of the treatment while the eucalyptus was not used, and the patients used sulphur locally at that time. Adding the above experience to the unqualified indorsement of the eminent practitioners herein mentioned, entitles this remedy to a trial in this much and justly feared disease. Where it is used in spray, so that enough is swallowed, I should not administer internally, but should otherwise. I only intended to state its clinical value, and not to analyze its therapeutic action, which all can do for themselves that wish.—J. V. Stevens, M. D., in *Chicago Medical Times.*

Indications for Nitro-Glycerin.—The value of nitro-glycerin in various diseases, as angina pectoris, hemicrania, and neuralgia, and also in sea-sickness, certain forms of anæmia, etc., depends on the existence in these of an irregular distribution of the blood. This abnormal condition may be recognized by a certain grade of pallor of the skin, especially of the face, an appearance co-existent with a weak pulse and small radial arteries, hard and frequently situated at a certain depth. When, on the contrary, headache and neuralgia occur in persons with chronic congestion of the subcutaneous vessels of the face, nitro-glycerin is contra-indicated; and similarly it should not be used in asthma when the face is congested from the effects of the emphysema. Thus it may be said that the best therapeutic results from nitro-glycerin may be obtained in those cases in which angina pectoris, neuralgia, etc., are associated with pallor of the countenance.

The condition of the pulse is the best indication for the use of nitro-glycerin and the safest guide for the determination of the time in which one should begin the cure. The smaller the radial artery is, so much the more rapidly does it dilate under the influence of the drug, and so much less are the secondary effects produced by it; on the contrary, the fuller the pulse and the more tense the radial artery, so much less this resents the influence of it.

When the pulse is small, the usual dose of one drop of a one-per-cent. solution is sufficient, while if the pulse is large, two drops may be required to obtain the full effect. When the radial is soft and the pulse weak, smaller doses should be given—one-half to one-fourth of a drop. The sensations experienced by the patient, throbbing and pain in the head, as well as the distension of the radial artery under the observer's finger, should be the guide for the increase of the dose.—*Giornale Internazionale delle Scienze Mediche; Can. Prac.*

Antipyrin and Thallin in the Treatment of Typhoid.—Dr. Francis Minot, of Boston, has formulated the following (Jour. Am. Med. Assoc.) as the result of the study of twenty-four cases of enteric fever, treated by antipyrin and thallin, at the Massachusetts General Hospital:

1. Both antipyrin and thallin have a remark-

able power of reducing the temperature in typhoid fever. 2. In no case was the use of these refrigerants apparently followed by any unfavorable effect upon the course of the disease. 3. The general condition of the patient was more comfortable after taking antipyrin and thallin, which were often followed by sleep. 4. The refrigerant medication by antipyrin and thallin appears to have no specific or decided effect upon the course or issue of typhoid fever. It often contributes much to the patient's comfort, and perhaps directly promotes his safety. 5. The effect of antipyrin and thallin in promptly lowering the temperature, shows that the danger in typhoid fever does not consist in high temperature alone, and that the latter is rather an index of the violence of the abnormal condition which we call fever, though, perhaps, adding somewhat to the danger. 6. By the internal use of antipyrin and thallin, all the effects which are claimed for the treatment of typhoid fever by the cold bath, are readily obtained without the trouble and inconvenience of the latter method, and without exposing the patient to the dangers of exhaustion and shock, consequent on the fatigue of removal from bed. 7. These remedies may be given without danger to the youngest patients in suitable doses, and indeed, their beneficial effects are more decided, and the unfavorable consequences less observable than with adults.—*Canada Lancet.*

How to Prescribe Santonin.—Dr. Norderling, of Rockford, Ill., gives a very clear account of how santonin should be prescribed to obtain its full physiological effect. In order to accomplish its therapeutic object, it is necessary, first, that santonin be in a form in which its vermicidal action can be exerted; and secondly, that it reach the habitat of the parasite. Santonin is insoluble in water and dilute acids, but dissolves in the saliva, and the gastric, intestinal and pancreatic juices. Solution in the gastric juice takes place so rapidly that the minimum dose is completely absorbed in the stomach, and taken into the circulation before reaching the intestine. Consequently, in order to obtain its vermicidal effect, it must be administered in such a form that it will not be acted upon by the gastric juice. It has been proved by experiment that santonin, when given in an oily solution, is not at all absorbed in the stomach, the entire quantity passing into the intestine; and Küchenmeister has shown that whilst ascarides are not affected by santonin crystals floating in water, they are killed when brought in contact with an oily solution of the drug. In such a solution, any form of oil may be used, and the best effect is obtained by three grains of santonin dissolved in two ounces of oil, to be taken in four doses. It is good practice to add one drop of wormseed oil to each dose, all volatile oils being poisonous to the lower organisms. If movement of the bowels is desired, castor oil will be suitable, although not too large a dose, because with strong peristalsis the santonin does not remain long enough in the intestine to produce the desired effect. About two drachms of the oil to each dose will be sufficient.—*Med. Record.*

Creosote Treatment in Phthisis.—For many years Dr. J. Solis Cohen has been using creasote in phthisis, not as a specific, but for the purpose of preventing a retarding decomposition of undigested nutriment in stomach and bowels, on the same principle in which he has been using it in chronic diarrhœa for more than twenty five years. He always prescribes the beechwood creasote, and is usually supplied with the product from Dupont's gunpowder mills. The dose given is half a minim three or four times a day after meals. This dose is rarely exceeded. The creasote is given in gelatin capsule, with powdered extract of licorice to give it bulk, and, according as the indications may demand, powdered digitalis, quinine, iron, or iodoform, or any other drug required, may be added. The formula most frequently prescribed by Dr. Cohen reads as follows:

> Powdered iodoform, 30 grains;
> Pure creasote (beechwood), 15 minims;
> Powd. ext. licorice

sufficient to make a mass, which is divided equally into thirty parts, which are dispensed in gelatin capsules, of which one is taken three times a day after meals. Additional capsules containing one grain of iodoform are supplied when it is desired to increase the quantity of that drug without increasing the amount of creasote. It is ten or twelve years at least since Dr. Cohen has been using creasote in phthisis, alike in private, hospital and dispensary work, and with such benefit to nutrition that he rarely prescribes either cod-liver oil or syrup of hypophosphites.—*Polyclinic.*

Composition for Removing Ink.—In two quarts of water, previously boiled and cooled, dissolve four ounces of citric acid. Then add six to eight ounce of a strong, strained solution of borax, after which the whole may be put in a bottle or suitable receptacle. Then to two quarts of water, previously boiled and cooled, add three quarters of a pound of chloride of lime. Shake and let stand from four to six days, after which strain and from six to eight ounces of a strong solution of borax, and place in a separate bottle.

To remove ink from paper, cloth, or other absorbent substance, the composition in bottle No. 1 is applied so as to thoroughly saturate the place occupied by ink, a blotter being used to absorb all waste moisture. By the combined use of the two fluids thus described, writing inks or other fluids will be immediately dissolved and removed from the paper, so that the latter may be again written on.—*Lithographer.*

Guarana in Sick Headache.—A correspondent writes to the Amer. Med. Journal: "Allow me to call the attention of the medical profession to fl. ext. guarana (paullinia sorbilis), (P., D. & Co.), which I tried in three cases of sick headache. The first dose, 20 gtt., lessened and the second dose, followed in fifteen minutes, stopped the headache entirely."—*Northwestern Lancet.*

The Medical Age.

Vol. V. DETROIT, OCT. 10, 1887. No. 19.

Original Articles.

A CONTRIBUTION TO THE STUDY OF THE THERAPY OF LITHIA WATER.

BY WILLARD H. MORSE, M. D., WESTFIELD, N. J.

Lithia, though having all of the ordinary remedial properties of other alkalies, is, however, possessed of certain peculiar advantages, which render it the best exponent of alkaline therapeutics. In point of general appreciation, potash, soda or lime may have the possession of prestige, but it is becoming more and more apparent that lithia will accomplish all that the other salts have gained honor for. It has been just seventy years since Arfveldson discovered the mineral which was named by his master, Berzelius; and it has been fully thirty years since it claimed a place as an antacid, diuretic, and antilithic. The solution of the integrity of the alkalies in discussion for half a century, and the confessed lapses of soda and potash, have furnished sufficient reasons for the blotted pages of the history of the salts.

If we seek the immediate cause for the tardy recognition of the value of the drug, not only by the profession at large, but by the pharmacopœais, we may find it in the rival claims of the carbonate and citrate, and at points where a spirit of rivalry is rarely, if ever, presented. In spite of Garrod, Ure and Squire, with their uniform success with the carbonate, there arose a decided preference for the citrate, especially in England. The idea grew apace, only to fail when it was proven that the citrate is decomposed before entering the circulation, occurring in the blood and finally in the urine, in the form of the carbonate. This deduction resulted in the discovery of further fault, until something like a compromise was effected in the way of a manifestation of preference for natural lithia water. In fine, it seems to be a fact that the form in which the alkali is now most commonly prescribed is that of the natural water. At least this is the case in New York and Philadelphia, where the market for the carbonate and citrate is dull at best.

Lithia water may be described as in general favor, or if favor is at all lacking, it is because of the use of some of the inferior qualities of the water, which are unfortunately urged upon the attention of the profession. Probably the best results may be witnessed from the use of the Londonderry lithia water, which contains a larger quantity of lithia, and is found in combination with more valuable minerals than any other water. It may be a use of therapeutical license, but it is the general opinion that the water is the ideal form for the employment of the salt, and that its occurrence in the water presents it at the fore of the alkalies. There can be no error in saying that the therapy of the Londonderry lithia water is the therapy of lithia, and that the therapy of lithia represents the best applications of the alkalies. Without quoting authorities in detail, the uses of the water may be briefly summarized from recent literature and from the note-books of leading physicians.

It is a mistake to suppose that the salts occurring in the water exhibit any toxic properties, corresponding in this essential with the waters exhibiting other bases, and from the absence of a property ignorantly attributed to it as fulfilling a most obvious indication.

Imprimis, there is the long-deserved reputation for the cure of gout and rheumatism. That it is adapted to the involved diathesis is gospel of the age of thirty years. Times have changed since GARROD in 1857, put forth the well-known dogma that "lithium is the only known solvent of the urates and crystals, which are the prime factors in gout, rheumatism, gravel, and many renal diseases." But with all of our modern ideas concerning microbes and bacilli, it is still a received item of fact that the several affections named, are equally amenable to the treatment. Internal use of the water in rheumatism and gout should have conjoined with it a serial arrangement of baths douches, etc., which are justly esteemed promotive of action, though possibly not from inherent worth, but on general hydrotherapic principles.

When the joints are enlarged the systemic action of the water may be increased by enveloping the affected parts in cloths wrung out of the water, as hot as can be borne. I am well aware that this has an empirical sound, but the evidence of leading practitioners is in its favor. This is especially noted in the case of the smaller joints remaining swollen and tender after the subsidence of the acute symptoms. Of these acute symptoms it may be observed that tincture of colchicum as well as salicylate of soda have but little effect upon them, while lithia water causes their rapid disappear-

ance. It may be further stated as a matter of fact, that though the alkaline treatment of rheumatism has obtained condemnation because of the dyscrasic state induced by the enormous quantities of alkali necessary for cure, there cannot attach such condemnation to the treatment by lithia, for even were large quantities made necessary, there can never be any unpromising sequelæ. If I may venture a personal expression it would be that I recognize no preferable method of treating rheumatism.

Though it is no longer fashionable to photograph the "uric acid diathesis" with horns, tail, and sulphurous odor, yet there is no question as to the utility of the lithia water in renal affections. The carbonate has lost favor as too irritating to the stomach, and the water, which is perhaps more effective, has no such objection. In the solution of renal calculi, it is notable that the lithia water will effect in a short time that which the potash salts will not effect unless long-continued. It accomplishes much that a successful surgical operation can do, the only lack of success being when the urine is alkaline in reaction. Where the urinary organs are irritated, whether from calculi, enlarged prostate, gonorrhœa, cystitis, stricture, or acidity of urine, great relief is experienced. If it fail in treating either calculous or cystic troubles, it is only when the urine is ammoniacal and loaded with phosphates. In such case I would employ the benzoate of ammonia, in some cases with, and in others without, the lithia water.

In nephritis the water may be drunk *ad libitum*, with assurance of cure in the early stages, and of palliation when the disease is advanced. The efficacy is marked whether the disorder occurs in a gouty or rheumatic subject, or in one where such indication is wanting. The results are generally satisfactory, and are more marked than when brought about by the extemporized solution of the lithia salts. It is a good idea to use iron in connection with the treatment, if an anæmic condition is to be corrected. If there is an indication for action on the glomerule of the kidney, it is well to combine digitalis, prescribing a tablespoonful of the infusion three times a day while continuing with the lithia water. Admirable results attend the use of the water externally, applying it by spongio-piline to the abdomen, while at the same time the patient is freely drinking the water. It is not to be denied that there is no more potent remedy for Bright's disease and the resulting dropsy. The same cannot be said, however, of general dropsy.

It seems to be no longer disputed that the hepatic action of lithia water is pronounced, especially in the treatment of incipient cirrhosis, congestion of the portal vein, and jaundice. While it is not other than useless in hepatic colic, lithia water has the property of prevention of the attacks. From the same fact the same agent is useful in the so-called bilious sick-headache, and in relieving duodenal catarrh. It was formerly held that the close relationship between rheumatism and diabetes should lead to the use of litha in the latter disease. There is, however, no relief from the lithia except when the diabetes is hepatic in its origin. In that case the natural water has proved more useful than the most elaborate and diligent treatment with the salts. A suitable diet and regime is to be enjoined, and if I were addressing a patient of my own it would be with advice to seek residence at or near the springs.

As a remedy for an abnormal and excessive deposition of fat, lithia water is uniformly serviceable, but should be discontinued when there is a threat of anæmia. I prefer it in obesity to the bromides, which, though increasing waste, do so at the expense of a severe gastro-intestinal catarrh, and to a "course" of alkalies, which, necessarily requiring a protracted employment, are not as efficacious. In the indigestion of obese subjects, and indeed, in atonic dyspepsia, I find the acidity and flatulence much relieved. It goes without saying that there can be no treatment of dyspepsia preferable to the use of lithia water in combination with papoid, or vegetable pepsin.

In conclusion, I agree with the leading American therapeutist that "the psychical influences of change of scene and associations are largely concerned in the results of treatment with the water of mineral springs." Excellent though the water is as found in the market, seven-fold better are the draughts taken from the springs as it bubbles forth glad with granitic flavors.

A CASE OF DELAYED HYDROPHOBIA.

BY FRED R. BOYD, M. D., CEDAR SPRINGS, MICH.

On the night of September 15th, 1887, I was called out of bed at 10.30 to go a distance of 5 miles to see a man aged 78 years, and for whom I had prescribed before, but having been taken violently worse, I was called in a hurry to see him. Arriving at his bed-side, I found him in a terribly nervous condition, moving about upon his bed in hurried, spasmodic jerking, muttering half incoherent sentences, expressive of indescribable agony. About all I could understand was, "Oh! Why can't I be still?" "Oh! My throat, my breast," and then he would convulsively grasp at his throat, and beg for water, upon offering him even a teaspoonful of which he would start into the most violent clonic and tonic spasms, the one rapidly following the other. The spasm of the pharynx and muscles of the throat and chest

were much more violent than in any other part. Upon being told to do so, he would lie down upon his back and exert all his will power to be quiet, but in an instant he would spring up from the bed, out upon the floor and grasp with mad violence any object within his reach. Intervals of quiet, lasting a few seconds, were followed by the most violent and uncontrollable attacks of spasm. During these short intervals, if the sound of water, whether dripping from a cloth being wrung, or pouring from one vessel into another, fell upon his ear, it would instantly throw him into another spasm, when a sticky, frothy mucus would be spit from his mouth. This spitting and hawking he kept up constantly.

All these symptoms were closely observed in much less time than it requires for me to write them down. To relieve him, I immediately prepared a strong solution of chloral hydrate, thinking he might at least be quieted down a little, but he could not swallow a drop of it. The throat seemed to close like a valve, and spasm would come on, the violence of which I can remember much better than describe. Pain was referred to the back of the left hand, where I found an old cicatrix. I now had recourse to my hypodermic syringe, and immediately injected under the skin of his arm about a grain of the sulphate of morphia in solution. This seemed to make him worse instead of better, and after waiting a reasonable time again injected another grain of morphine with no better results than before, and I repeated the dose until five grains had found its way into the cellular tissue beneath his skin. About three hours of restless sleep followed, during which time the sound or touch of water would bring on a paroxysm of violence.

As soon as I felt certain that too great a state of narcosis would not follow my morphine, I left him to make my daily round, but was hastily recalled at 5.30 P. M., Sept. 16, when I found my patient in a most pitiable condition. Wild, uncontrollable as a human being could be, tearing to pieces every thing he could get a hold of with his hands and mouth; making every effort to bite and tear his attendants. The dread of water continued and the violence of the contractions of the muscles of respiration would seem almost at times to prevent his catching his breath.

I again had recourse to morphine hypodermatically, injecting at once five grains deeply into the deltoid. I hope that my medical brethren will not condemn me as a fabricator when I say that this dose was repeated three times, making 20 grains, before I obtained narcotic effect sufficient to quiet him. Even after this, during the most profound effect of the narcotic, it was only necessary to touch his face with a wet cloth to induce spasm.

During this time I could notice that the powers of life were rapidly yielding, although the organic functions seemed quite well performed, and the temperature but slightly elevated. The pulse, irregular from an old heart lesion, was growing more so and getting very weak.

I left him on the morning of the 12th, with directions to call me if needed, thinking he could not live the day out, but at 2 o'clock on the morning of the 13th I was called up to go and see him as quickly as I could. I found him very wild and uncontrollable, but too weak to carry it to the same extent he had done before. I now injected morphia sulph. until I had him quiet again, using this time about 18 grains, and remaining with him until daylight. I left him quiet, but only partially asleep. I returned at six o'clock P. M.; found him in a semi-conscious condition; breathing very irregular, and life fast ebbing away.

He had deceived us so often when in this condition, by waking up and growing violent, that I thought it better to give him another small injection, but in the attempt I broke my hypodermic syringe, and instead of the usual injection, I left him a solution of morphine and chloral hydrate, thinking he was so far gone that the small amount of liquid would not disturb him. In this, however, I was mistaken, for upon pouring it into his mouth he lapsed in terrible paroxysms, which lasted until about midnight, when death came to his relief.

After perusing the above, the following history will be of interest to the reader:

Thirty-eight years ago this summer, while our patient, then living near Pontiac, this State, was walking home one evening, he was attacked by a dog, and bitten upon the back of the left hand. He went on some distance before he learned that the dog was rabid, and upon learning this fact thoroughly sucked the wound. The next day he went to a physician and had it excised and cauterized, and afterward took some form of treatment as prevention of disease. Two other men were bitten by the same dog on the same day, and both of them died, one within four weeks, with all the symptoms of hydrophobia, and the other in a few days from "blood poisoning." The laceration from the bite, which was on the face of the latter, was extensive. Other animals were bitten by the same dog, one or two of which afterward showed unmistakable signs of hydrophobia.

Our patient lived in dread of the disease for many days, and took the precaution of a guard by day, and was bound with cords to his bed at night, but felt no symptoms, with the exception of a slight start and dread when suddenly seeing water, or attempting to drink it. The feeling was easily controlled and passed off in a short time. About ten years after the time he was bitten, he had a short, but violent

attack of nervous symptoms, which was described to me as quite characteristic of the disease, but which soon passed off leaving him in usual health.

He had long ago thoroughly believed that his sucking of the wound and treatment at the time had entirely removed the virus and saved him completely from the danger of the disease, so, at so late a date, the moral influences surrounding the history of the case, could scarcely have had any thing to do with bringing it on.

I have carefully looked up the facts in relation to the above case, and can assure the reader, who may be at all skeptic regarding it, that all I have written can be well and amply authenticated.

Of course my diagnosis of the case was hydrophobia.

ATHEROMA OF THE LEFT CORONARY ARTERY RESULTING IN ANEURISM OF THE APEX OF THE LEFT VENTRICLE.*

BY ROBERT TILLEY, M. D., OF CHICAGO.

As this subject is so little associated with my usual practice, it is with hesitancy that I present even this short report. Aneurisms of the heart, however, are not common in clinical reports, and I trust that fact alone will justify the presentation of the case.

The patient was an intimate friend of mine, and it was only at his special request that I took charge of the case. He was 57 years of age, and his occupation was that of a lawyer. His previous life was unexceptionally exemplary. He did not use tobacco in any form, and was exceedingly temperate and methodical in all his habits; his carriage was such as to suggest the impossibility of any hurry on his part. His general build may be characterized as corpulent, although when young he was very thin. At the age of 30 he was declared to be dying of consumption. Recovery, however, seems to have occurred without medical assistance.

An ill-defined malaise extending over a period of six weeks or two months suddenly increased to such an extent on the 20th of October, 1885, that he was unable to leave the house, and was obliged to call assistance. This malaise consisted of wandering pains, not severe, over the chest, extending to the left shoulder and down the left arm, sometimes reaching the wrist. They were not periodic, and could not be associated with any definite act of daily life, but rather come on when any change of action was about to take place.

He first called my attention to this, thus: "I don't know whether I want to follow a doctor's directions or not. I get occasionally flying pains over my chest and in my left shoulder, but on walking about a little I can make them disappear." As he always had a marked antipathy for medicine of any kind, and I did not possess any firm conviction of any greater benefit likely to follow anything I could suggest than the benefit he claimed from exercise, I told him to continue to use the method he had found successful, and report later. At this time I had no conception of the existence in his case of atheromatous coronary arteries, nor did I suspect that the wandering pains were associated with incipient angina pectoris.

About six weeks after the interview above referred to, an acute attack of difficulty of breathing, associated with severe coughing and anxiety of countenance, came on. From this time he did not leave the house only for short walks. The pulse at this time was 120, feeble but regular. Breathing very laborious. Could not lie down on the back or left side, and only for a short time on the right side. Cough was very troublesome. No special features present in the alimentary canal. On percussion no perceptible enlargement of the heart was detected; percussion also failed to reveal any enlargement of the liver. On auscultation the heart revealed no definite abnormal sounds. The principal feature which I observed was that of asystole, the ventricles seemed to stop as though shutting down on a pledget of wool. I find that CONSTANTIN PAUL refers to this symptom very definitely as associated with aneurism, or what he calls false aneurism, of the heart. It certainly struck me as the one striking feature of the case. There was at this time no œdema, no fever, no albumin in the urine.

From the beginning his condition was considered grave, and consultation was obtained from the first.

DRS. H. A. JOHNSON and R. H. BABCOCK both saw the case, and the former remained as consulting physician to the end. The various heart tonics, such as strychnia, arsenic, and digitalis, were used with no demonstrable effect except this, that when the digitalis was increased so as to diminish the frequency of the heart's action, the action became so tumultuous and inco-ordindate that it was deemed best to let it beat at the gait that it found most convenient. In about a fortnight after the commencement of the acute attack anginal pains became more prominent, and atheroma of the coronary arteries was suspected. There was no evidence, however, of any atheroma of any superficial vessels. From this date a bottle containing carbonate of ammonia and camphor became his companion, supplemented with small pellets of nitro-glycerin, 1-100 of a grain. The latter gave more satisfaction than the nitrite of amyl. The anginal pains were not at any time characteristic for their severity, but the pallor of countenance and anxious ex-

*Read before the Chicago Medical Society, June 6, 1887.

pression were characteristic. Later on the feature of asystole was not so well marked. The feet had exhibited, on several occasions, a tendency to œdema, but about ten days before death it began to increase rapidly, but no remedies were found capable of removing it. The œdema extended gradually to the hips, abdomen, and chest, and about nine weeks after the acute attacks, while walking across the floor he fell dead.

I would like to remark here that he derived marked comfort from gentle exercise in the fresh air. When the sidewalks were covered with ice so that he could not possibly walk out of doors, he would wrap up and walk in a room with the windows wide open. Nitro-glycerin and carbonate of ammonia were the only remdies that gave him any appreciable relief.

The autopsy, which he himself requested—he had a horror of being buried alive—reveals nothing remarkably peculiar except the conditions of the heart. This autopsy was performed on the day following the death, by DR. FRANK CARY in the presence of DRS. H. A. and FRANK S. JOHNSON, R. H. BABCOCK and myself. The heart was somewhat enlarged, all valves were competent, there was little or no atheroma manifest, except in the coronary arteries. One of these I show you almost completely occluded. It was just below this manifest atheroma of the left coronary that in the wall of the left ventricle near the apex the aneurism had developed. I should characterize it as about the size of a large walnut. The wall of the heart in the thinnest part was estimated by DR. F. JOHNSON as only two millimètres thick. The aneurismal cavity was filled with blood, part of which showed signs of organization and part signs of disintegration. The clot was evidently formed at two different periods. The microscopic section for which I am indebted to the kindness of DR. F. S. JOHNSON shows this well. There were no signs of chronic endocarditis, but some of slight chronic myocarditis.

BRAMWELL divides aneurisms of the heart into acute and chronic. CONSTANTIN PAUL calls such cases false aneurisms, and then adopts the same division. "Acute Aneurism," says BRAMWELL, "may result from anything which causes rapid local softening of a limited portion of the cardiac wall. Acute ulcerative endocarditis, acute localized myocarditis and acute softening the result of thrombosis of the coronary arteries are the conditions which are most likely to cause acute local dilatation of this description."

"Chronic aneurisms of the heart," he continues, "are almost always the result of chronic myocarditis. Fatty degeneration seems to be an occasional though extremely rare cause of this condition." He nowhere calls direct attention to an atheromatous condition of the coronary arteries as a cause. CONSTANTIN PAUL speaks of a case under his observation where there was an atheromatous condition of the aorta and he supposed this to be the starting point in the case that he reports.

DR. MARY PUTNAM JACOBI says (in Wood's Reference Handbook): "The essential cause of heart-aneurism is thus identical with arterial aneurism, the lesion of structure is, however, different as might be expected from the difference of tissue in the heart and arteries. In the latter, that is, the arteries, non-traumatic aneurism nearly always depends on atheroma; in the former upon fibroid disease the result of chronic interstitial myocarditis."

In the present case, I think, there is no doubt that the starting point was the diminished calibre of the left coronary artery by this atheromatous condition diminishing the supply of nutriment to the corresponding tissue and thus producing the extreme thinness of the walls in the part supplied by the artery. The clot of blood was probably the result of the incapacity of the left ventricle to completely contract and expel its contents and probably occurred in part at the time of his acute sickness about nine weeks before death.

The presence of this clot of blood fully explained the characteristic sound which I clearly recognized at the first and which I described as though the ventricle contracted on a pledget of wool.

CHICAGO MEDICAL SOCIETY.

STATED MEETING, June 6, 1887.

The President, WM. T. BELFIELD, M. D., in the chair.

DR. FRANK BILLINGS exhibited a very interesting collection of

BACTERIA CULTURES

and explained the mode of their culture, and gave the name and description of each bacterium.

The President asked whether this method of culture was not of extreme value in differentiating the different sorts of bacteria one from another, and whether this did not enable investigators to distinguish the different sorts of bacteria.

DR. F. BILLINGS: At the present time there are three comma bacilli that are well known: the comma bacillus of Asiatic cholera, discovered by KOCH, the one discovered by DENEKE in old cheese, and the one discovered by FINCKLER and PRIOR. These under the microscope look so much alike, that one would not dare to differentiate between them, but their growth in gelatin tubes is so characteristic that one can easily tell the difference. The cholera bacillus

grows upon the plate in a peculiar granular colony, that does not make the gelatin fluid so quickly as the bacillus of FINCKLER or DENEKE. FINCKLER makes the gelatin in tubes, fluid from above downward, first where the needle is run into it and again at the top. Those found in old cheese make it fluid in the same way, but less quickly; while the cholera bacilli grow in a characteristic funnel-shaped form. Then of the staphylococci, there are the styahylococcus pyogenes aureus, the staphylococcus pyogenes citrius, and the staphylococcus pyogenes albus; these are called white, orange and lemon color by their characteristic growth on culture media; *in time* one will be white, one orange and one lemon color, but in the first week one could not tell the difference. It is quite as important to know how to cultivate bacteria and detect the difference in growth as to know how to differentiate bacteria with the microscope by their form and their reaction to the aniline dyes.

DR. LESTER CURTIS, read a paper on

CALCAREOUS CONCRETIONS IN THE EXTERNAL EAR:

The following case, occurring in an old patient of mine, has seemed to me to be unusual. I had treated the patient for several years for slight ailments, chief of which was an occasional malarial attack that gave me some trouble on account of her inability to take quinine.

In August, 1886, she called my attention to a painful swelling in the external meatus of the right ear. I considered it to be a case of ordinary superficial inflammation of the meatus and directed instillation of a solution of morphine. The pain at once ceased, and in a day or two the swelling subsided, and I supposed that the trouble had resolved, as has usually occurred in my experience after such treatment. But a little swelling and tender ness remained. In about two weeks, without further symptoms than a trifling uneasiness, there was a discharge of a drop of purulent fluid which I am sorry that I had no opportunity of examining. I paid no more attention to the case until about a month after this, when she called at my office, and told me that the same morning the ear had felt a little uncomfortable, and on picking it, a calcareous mass about as large as a millet seed had come away. A day or two before she had removed a similar mass. These masses, she said, resembled lumps of old lime as nearly as anything she could think of. On examining the ear I saw a red and indurated place about half way down the meatus, in the upper portion of the posterior wall. In the middle of this spot was a pit about as large as the mass removed, and surrounding the pit a greater or less amount of white granular substance which grated against the probe and was of stony hardness. I attempted to detach some of it with the sharpened end of the probe, but it was firmly adherent, and appeared to be infiltrated throughout the the tissue, and I succeeded in getting away only a few small flakes. Besides this, nothing unusual was detected in the ear with the exception of a slight redness of the posterior rim of the drum head. The hearing was perfect. A slight feeling of irritation was noticed for some weeks, but gradually passed away. At present, so far as I can discover, the ear is quite normal.

I do not think that there is any possibility of the concretion being a foreign body; nothing with the exception of the morphine was introduced into the ear, and that could hardly have produced such an effect; besides, part at least of the substance was infiltrated among the tissues of the meatus. Superficial abscesses in which there is a free discharge of pus do not undergo calcareous degeneration. The appearance was that of a gouty concretion, and there is a trace of gout in the family. Her father, though an active and abstemious man, having had slight attacks of the affection, but she has never had any gouty symptom that I have been able to discover, and gout does not suppurate. I have never heard of a case like this, and the somewhat limited amount of literature on diseases of the ear, accessible to me, makes no mention of anything of the kind.

DR. R. TILLEY thought the author should have examined the concretion microscopically and determined its nature. For himself he was of the opinion it was probably composed of dried epithelia resulting from a partly absorbed furuncle.

DR. LESTER CURTIS: I have no special reply to make to the conjectures. I never examined the ear of the patient before this thing occurred, but I have examined both ears since that time and so far as I could see there was nothing in the shape of a sebaceous cyst in either ear. One would naturally suppose that if such things occurred there would be more than one of them. I would imagine if one should occur in such a locality there would be likely to be others. One word in regard to treatment I used, which I have recommended in a considerable number of cases and always with benefit. While I have never used the rubber tube, I have seen a good many cases where I would not venture to insert it. The solution of morphine will quiet pain in every case. And in every case I have happened to meet, it has stopped the inflammation, and the pain has not recurred.

DR. W. L. AXFORD: I would suggest that the case was one originally of sebaceous cyst, that the contents of the cyst had undergone calcareous changes and afterwards inflamed. I have seen that happen in the head but never in the ear.

DR. R. TILLEY reported a case of Atheroma of the Left Coronary Artery, resulting in Aneurism of the Left Ventricle. (See page 436)

DR. ROBERT H. BABCOCK: It was my good fortune to see the patient to whom DR. TILLEY has referred this evening, and as it was a case of remarkable interest and there are several points illustrative of the peculiar symptoms due to atheroma of the coronary arteries and also illustrative of the difficulty, many times, of diagnosticating the condition, I would like to refer to them. The first symptom mentioned by DR. TILLEY as important was that of angina pectoris, and herein this case was peculiar; the pains were flitting and were relieved by gentle exercise. It was wholly characteristic, however, in that the pain extended to the left shoulder and down the left arm. That is the characteristic pain of angina pectoris, although there are so many deviations from it that angina pectoris frequently passes unrecognized by the general practitioner. There is a liability, oftentimes, to mistake angina pectoris for neuralgia of the stomach. I have under observation a case where the pain has been considered for years gastralgia, but it is without doubt angina pectoris; the arteries are atheromatous and there are characteristic cardiac murmurs which are due to the atherosed condition of the valves. The pain of angina may sometimes be localized in the wrists. DR. SAWYER once mentioned to me a case in which the angina pectoris always manifested itself by a feeling of cord-like constriction about each wrist. There was, however, with this an attendant paleness of the countenance, and anxiety, and the patient was obliged to stop in his tracks until the pain had passed. The pain in angina pectoris may extend through to the back, or up into the occiput; at other times into the right shoulder and down the right arm. It may also radiate into the abdomen and down the inside of the thighs. It is usually so severe that the patient has to stand still and wait until the pain passes by. In the case mentioned the pain was relieved by gentle excercise, and that possibly may throw some light upon the question as to whether angina pectoris is always due to arterial spasm or not. If due to arterial spasm in all cases it would seem as if any effort of the muscular system would increase the arterial resistance through contraction of the muscles, and thus make a greater demand upon the heart ; in which case exercise ought to augment rather than relieve angina pectoris. Particlarly if, as LEYDEN is inclined to think, angina pectoris is really due to spasm of the coronary arteries as well as general arterial spasm, resulting in temporary anæmia of the heart muscle. In cases where the paleness of countenance would seem to confirm this theory we find that remedies which produce arterial dilatation, such as the nitrite compounds, always give relief. In this case there is an apparent contradiction; not only did exercise afford relief which would seem to indicate that contraction of the peripheral vessels had nothing to do with the production of the angina, but on the other hand since nitro-glycerine gave relief, there must have been arterial spasm somewhere.

The diagnosis of this case was not as difficult as is often the case, owing to the peculiarity of the cardiac sounds, although none of us, I think, really suspected the condition which we found of the coagulum in the left ventricle filling up the lower third of the cavity. I gave my diagnosis of degeneration of the left ventricle, with atheroma of coronary arteries, because of the very peculiar character of the sound over the left ventricle, which DR. TILLEY has very aptly described. It was a toneless, muffled sound as if the heart struck the chest wall through an intervening layer of cotton, while on passing the stethoscope from the left ventricle toward the right ventricle the first sound came out with its usual clearness and more or less of its booming quality, and it was on that that I based my diagnosis. At the post-mortem examination we found degeneration of both ventricles, more marked in the left than in the right. This case would probably be classified by LEYDEN as subacute. LEYDEN has treated this subject in the most scientific manner of any author, since generally the subject is treated in a desultory way under the various heads of chronic myocarditis, fatty degeneration, aneurism, rupture of the heart. etc.

LEYDEN would group together all the different expressions of the same pathological condition, that is sclerosis of coronary arteries and all conditions dependent upon that, and he considers it under one subject of the changes of the heart resulting from the sclerosis of the coronary arteries. He recognizes as acute cases those in which the patient is ill perhaps for a few moments, or hours, or days. The first symptom is often a sharp attack of angina pectoris, or an attack of great cardiac distress and oppression without positive pain, which GAIRDNER speaks of as *angina sine dolore*. In these cases the patient frequently first discloses that he has heart disease by falling dead in his tracks. In cases of atheroma of a small branch of the left coronary artery, usually the anterior descending branch, frequently we find a condition closely resembling the hæmorrhagic infarctus and the heart ruptures at that point; in acute diseases death may be due to the rupture, although more often to failure of the heart. Subacute cases, of which this seems to be an example, run their course in a few weeks or months and we find a combination of changes from acute fatty softening to chronic fibroid change, and these patients generally suffer a good deal with angina pectoris. The chronic

cases are those that last for years, sometimes fifteen or twenty, and the symptoms are those of cardiac weakness or progressive cardiac failure, and these patients may die suddenly or gradually. In these cases we generally find extensive myo-carditic changes with great thinning of the heart walls.

The treatment of these cases is, of course, a thing which interests us. It is very unsatisfactory: is merely palliative, and consists chiefly, in the severe cases, of rest, with cardiac tonics and stimulants. Of especial service in angina pectoris are the nitrite compounds, although Leyden rather protests against the use of nitrite of amyl and nitro-glycerine. He recommends the hypodermic injection of morphine, stimulants, such as ammonia and camphor, hot alcoholic drinks, and heat to extremities. The diagnosis has to be based, in most of these cases, upon the history and symptoms of progressive or sudden cardiac failure, and if we can find evidence of atheromatous change in the peripheral vessels the diagnosis is much easier. In auscultating these cases I have frequently found what seemed to me to be a peculiarity of the first sound. The sounds of the heart are nearly always described as free from murmurs, but since the booming quality of the first sound is undoubtedly due to the muscular element, and since the muscle of the heart is degenerated, the first sound takes on rather a short and valvular quality, resembling very closely a second sound, so that frequently in these cases the two sounds appear to be two valvular sounds. Although I am not yet prepared to say that one can base a diagnosis upon such a condition as that, yet I am satisfied that in cases where there has been marked atheroma of the radial arteries, with symptoms of heart failure, I have heard just this condition of shortness and valvular quality of the first sound over the left ventricle, particularly when over the right ventricle the sound is more prolonged.

DR. TILLEY said: I have nothing more to add except that I have known of two or three cases in which, after a hypodermic injection of morphine, in a condition of atheromatous coronary arteries, the patient has passed off very rapidly, and I would be chary of using it, especially if I could obtain a satisfactory result from nitro-glycerin.

DR. W. L. AXFORD: I have here the

SAC OF AN ANEURISM OF THE LEG,

not very large or elaborate, but interesting because of its locality and the history of the case. Some time last fall, along in November, a Bohemian came to the South Side Dispensary, having a little lump about as large as a walnut just above the internal malleolus. I could not get his history, as he could not talk English; all that I could make out was that it had been growing there about a year, and pained him some. The skin was natural over the growth, which felt soft and fluctuated. I made up my mind that it was some kind of a cyst, and advised him to have it excised. On cutting down upon the growth I found at once that I had made a mistake, from the color of the sac, which was blue. One of my assistants said he saw a little artery spurt. I stitched up the wound and found I had excised the sac of an aneurism. It was about the size of a walnut when fresh. This case was peculiar, as there were none of the usual symptoms of aneurism; it was also peculiar in the large size of the sac compared with the size of the artery. The patient made an uninterrupted recovery.

DR. JONES, of Pittsburg, Pa.: I heard only a portion of the discussion on the subject of angina pectoris. One symptom I will mention as having occurred in my own experience, that I believe is not mentioned in any of the literature that I am familiar with. In acute attacks of angina there is a feeling of constriction that may be relieved by firm pressure against a sharp body, such as the back of a chair or the edge of a table; that feeling has been invariably present in all of the cases that I have seen, and I do not know that it is mentioned anywhere. The use of nitro-glycerin and amyl nitrite I would suppose would hardly be proper in chronic cases, on account of the danger spoken of, the danger of sudden cessation of the heart's action from paralysis or failure.

DR. LAGREE, of Charleston, S. C., mentioned some

PECULIAR SYMPTOMS CAUSED BY EARTHQUAKES.

The earthquake in Charleston, with us, is a thing of the past. There were some peculiar features produced by the earthquake, from a medical point of view. One of the most common conditions was an obstinate nausea, and in treating these cases we found the only remedy that would give any satisfactory result was muriate of cocaine. Another condition we found was falling off of the hair in patches, especially among the ladies. I have had three cases in which the hair gradually fell out in patches, which I attributed to nervous shock. Fortunately the hair was generally saved. Those were the most prominent symptoms produced by the earthquake.

"The melancholy days have come, the saddest of the year," and to none are they sadder than to the country practitioner in the regions of mud roads.

Correspondence.

MEDICAL STUDENTS.

If an apology is necessary for writing this article, it can be found in one of a similar character that appeared in the September 10th number of the MEDICAL AGE, as also the discussion that took place on the SINNETT Medical Bill at the recent meeting of the Ohio State Medical Society, in Toledo.

The object of the bill referred to was the creating of a State Board of Health whose duty it should be, among other things, to examine all who locate in the State for the practice of medicine or surgery, after the passage of the act; thus taking the power to license the practitioner out of the hands of the medical colleges. It received so much opposition from the schools and from certain quarters in the profession, that it failed to become a law. That a bill of this character should receive so much opposition from those who would be its supposed friends, seems strange indeed. It may have been defective in many essential features, but it certainly was better than none, on the principle that "half a loaf is better than no bread." When one thinks of the number of poorly qualified graduates, who each year are turned out from the different colleges, and the ease with which a diploma can be obtained, he is certainly led to believe that it is time something was done to give us a better qualified class of practitioners.

I do not propose to give either the name of the school or the individual directly interested, but the writer knows a gentleman who went to one of the oldest and best known institutions in the state; an institution whose alumni occupy prominent places in the profession, not only in Ohio, but throughout the Northwest; an institution among whose faculty are men whom American medicine delights to honor, and yet, notwithstanding this brilliant record, the one referred to went to this college and bought a diploma as you would go to a store and purchase a suit of clothes. He was not required to attend a single lecture. This physician has two diplomas, and he bought both of them.

I know another instance in which a gentleman was graduated after attending lectures four weeks, although eleven weeks at another school constituted the sum total of his previous lectures.

In view of these and similar cases, is it not time something was done to remedy the evil?

There is, however, another phase of this question. While there seems to be a growing demand on the part of the more advanced members of the profession for our medical colleges to increase their requirements for graduation, is this the real remedy for the existing state of affairs? Does it not look like trying to put the roof on a house before the foundation is laid? If the practitioners themselves would require better literary qualifications of those who come to them to read medicine, would know to a certainty that they possessed the necessary preliminary training, the ranks of the profession would soon be filled with a better class of practitioners, and the colleges would feel that any effort they might make to elevate th standard of medicine would receive the support of the profession at large. But as long as we persist in sending them such poor material out of which to make doctors, if the expression may be allowed, they can but feel that their efforts are but poorly seconded. The number of medical men who can successfully wrestle with a dozen lines of their mother tongue without frequently bringing into requisition their well-thumbed dictionary to aid them in spelling the commonest and simplest words, is surprisingly small. This is a humiliating confession, but it is nevertheless true. Is it any wonder that so large a proportion of the laity look upon the profession of medicine much as they do the blacksmith or shoemaker; simply a trade?

It is not to be supposed that the millenium in medicine will dawn within the next decade, but it is to be hoped that those who wish to practice the healing art will be compelled, in some way, to be better qualified for its responsibilities.

W. A. DICKEY, M. D.

TIFFIN, OHIO.

AN OPINION WANTED.

At noon, on the eighteenth of last January, the dead body of Miss Ida Lee was found in her rooms, situated over a harness shop on Main street, in this place. The deceased was about 30, of rather small build, of highly sensitive organization, active and restless. She was a dress-maker and lived alone in her rooms.

She was last seen at about 9 o'clock the previous evening in a store across the street. She was also known to have procured a bottle containing from 1½ to 2 ounces of chloroform (the bottle was found empty beside the bed), which article she was in the habit of taking for every trifling ailment. On one or two occasions, recently, she had taken so much as to fall down insensible, greatly to the alarm of her friends who chanced to be with her. Her bed had been occupied, but not much disturbed or "tumbled." Lamp burning in chair near head of bed, and an open book lay, inverted, on same chair. Fire out in stove, but full of coal (hard) and room cold.

She was lying on her back, arms by her side and forearms flexed, at right angle with arm; thumbs turned into palms; a little dried froth about mouth; pupils dilated. She was in her night-clothes; a napkin was applied to her vulva, held by a bandage neatly pinned.

Slight blood stains were found on napkin, night-dress and under sheet, also on a rejected napkin that had, evidently, been worn. Two drams of blood would have produced all the stains.

On opening the body, a four-months' fœtus was found in place, in utero. The membranes were ruptured, and about an ounce of blood (coagulated) was in fundus. There was a discoloration, dimly marked, on posterior wall of cervix. It was one inch long by one-third as wide. (As the surface of mucous membrane was not broken, and it being the most dependent portion of womb, the possibility of post-mortem congestion suggested itself.) The stomach was almost entirely empty, lungs slightly congested, and all the cavities of the heart and the large veins were filled with dark fluid blood. The stomach was examined by DR. PRESCOTT, of Ann Arbor, with negative results.

A prominent dentist of this place, is under bonds to appear in court next month to answer the charge of the girl's murder.

The theory of the prosecution, as developed at the examination, is that: "The bruise or injury to posterior wall of cervix uteri did so act upon the nervous system as to cause eclampsia, of which the woman died." This is the sworn opinion of a local physician.

The defence will be that she died of chloroform poisoning, administered by herself to relieve pain, or with suicidal intent.

The questions of interest to physicians are: Does traumatism ever cause eclampsic convulsions?

Viewing all the facts, which mode of death seems most probable?

C. B. WILEY, M. D.

HOWELL, MICH.

POISONS AND THEIR ANTIDOTES.

There is no subject which receives so little attention and upon which so few articles appear in our journals, as the subject of poisons and their antidotes, and certainly there is no more important field of study to us, than this branch of our materia medica. Not but what sufficient attention is given to it in some of our colleges, but after graduation it is dropped as a dead language and it is indeed rare that any doctor picks up his toxicology to refresh his memory, or that any articles appear on it in our journals. It is also striking, how few possess any authority on this question, as Reese, Taylor, or others. They cost but a moderate sum and are, I consider, as indispensable as a materia medica. None of us can tell when he will be called upon to attend a case of poisoning, the antidote to which, chemical or physiological, he does not remember or has never learned. And as new alkaloids are being discovered, poisoning by them is becoming frequent and the old poisons, as arsenic, strychnine and laudanum are giving away to the newer, quicker and less painful agents which almost invariably terminate fatally. True, cases of poison do not occur often to a country practitioner but that is no reason why a knowledge of antidotes should be neglected. Let us awake on this subject, and when a case does occur we shall be armed to meet it. Review now and then the chemical and physiological antidotes, carefully note and make a memorandum of the new ones discovered, and by a little study and attention on our part we may soon be prepared for any emergency in poisoning.

F. E. COU, M. D.

CLAYTON, MINN.

SYRUP TRIFOLIUM COMP. IN SYPHILIS.

Last spring a young man came to me to be treated for syphilis, in the secondary stage. He stated he had been suffering from it for several years, and had undergone the usual mercurial treatment and, to use his expression, "the Lord knows what all." He was thin, nervous, had sores on both skins and, in fact, was "all broke up." His lower lip was very much swollen and scarred from the effects of mercury. He was also suffering from what he thought was asthma; but this was only from malnutrition. I decided to try Syrup Trifolium Comp., which I gave in combination with 5 grs. citrate of iron three times a day, for about two weeks. He began to improve right away. The asthma, swollen lip, and sores disappeared and he gained rapidly in flesh. He is still taking a teaspoonful of the syrup two or three times a day, and is apparently a sound man.

M. B. KETCHUM, M. D.

PALO PINTO, Texas.

A precocious fourth-year medical student in a conference before the Oporto School of Medicine is reported to have stated without calling forth protestations of negation, "that therapeutics is powerless and without value; the notion of remedies for diseases is a chimera which presupposes an utopia; and the cure of the patient is due to the moral influence of the physician and to the natural course of diseases much more than to pharmacological agents." Unfortunately, the dicta which most influence the profession are either, like this one, from undergraduates or from recent graduates who know little or nothing, practically, of that on which they eloquently write. In most instances, those who are qualified for an opinion on practical points are too much occupied in practice to permit excursions into literature.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., OCT. 10, 1887.

Editorial.

THE CONTRACT SYSTEM.

Gradually the question of the ethics of permitting a practitioner to make a yearly contract with a family to attend to its necessities in the way of medical treatment (prophylactic and curative) for a specified sum, is forcing itself on the attention of the profession. While the Code of the American Medical Association is silent thereon, that body some years ago declared by resolution that to thus contract is not the correct thing to do. But times change and we are changed with them, and the indications are that were such a resolution submitted to the profession to-day, it would arouse a discussion which would not be characterized by any great degree of unanimity of opinion. The profession of this city, as represented by the leading medical association, has declared, with great explicitness, against the resolution referred to. Several years ago it elected to its presidency one of its members who was in charge of an institution which, by public advertisement and private solicitation, sought to enter into contract with individuals to attend their diseases and to board and nurse them pending their recovery, for a fixed sum per annum. The ethics of such contracts was made the issue of the election, and the gentleman's succession to the office was thus the most emphatic endorsement possible of this contract system. During the past week, also, a member of the same Association was arraigned, on complaint of another member, for soliciting by means of letters written, the patronage of citizens, under the same system. The committee who sat in judgment on the case exonerated the accused and its report to that effect was adopted with great unanimity. It may, therefore, be justly said that the profession of this city has outgrown the feeling on this important question which prompted the condemnatory resolution of the American Medical Association, and we shall not be surprised to find the contract system quite generally in vogue before the lapse of many years.

Although the ethics of the contract system is still, in a measure, *sub judice*, the wisdom and justice thereof may be fortified with good argument. As it is much more important to the individual, and to the community of which he is a member, that he be kept healthy and productive, than that he be restored to this condition after a prolonged season of illness, preventive medicine, with all that it implies in the way of sanitation, is coming to be regarded as one of the most beautiful flowers of our civilization. Statistics have been carefully compiled which demonstrate man's pecuniary value to society, and the importance of his earning powers being preserved intact is thus emphasized. Unfortunately, however, the blossoming of this beautiful flower was not synchronous with that not less beautiful one whose glory it yet remains for the progress of the race towards the ideal to unfold, to wit, the gratitude of the people finding its expression in substantial reward to those who keep them well, by instructing them in the laws of health, studying the laws of epidemics in order to checkmate them, etc. Until the full unfolding of this flower the physician who seeks to prevent disease in the community in which he dwells, does so to his own injury. His conduct, judged by the commercial standard which obtains, borders close on insanity. Merchants, for instance, who would study and organize to devise means for removing the conditions which create a demand for their wares, would find it difficult to long maintain their standing among level-headed men. But physicians thus study and organize to bring about a state of affairs which, when once brought about, will make their occupation, like Othello's, gone. In a few instances they are properly paid by the State and by municipalities for this service on behalf of the public, but the great mass of the profession makes persistent effort at hari-kari in this matter.

If it be the duty of the physician to prevent disease (and we are committed to the belief that it is his highest duty) it is none the less the duty of those who receive the benefit of his service to this end, to provide him remuneration. This proposition will, we think, go unquestioned. Purely disinterested service is not expected in society in its present stage of evolution, and the man who would go about doing good without hope of gaining at least a livelihood from his efforts, would be voted, in modern vernacular, a crank. How then shall the physician, who would practice the highest branch of his profession, secure the wherewithal to satisfy the inexorable butcher, baker and candlestick-maker? There may be several ways, but we cannot now think of any which compares, in point of feasibility, with that which would obtain under the general adoption of the contract system. Under such a system the average income of the profession would, undoubtedly, be increased, and the increase

would be the return for services which, under the system now in vogue, go unrewarded. By its adoption one of the most incongruous things in the practice of medicine would be removed, and the public educated up to a proper appreciation of the service which the physician renders it.

The subject is one of vast practical importance, and we should be pleased to have a free expression of opinion thereon through these columns. That it is entirely unobjectionable its warmest advocates will hardly claim, but that it presents advantages over the existing plan there is abundant argument to prove.

THE MIND CURE.

Of the many methods of treating diseases, which have been tried in the effort to secure some means of directly effecting a cure, that of the "mind cure," so called, is at once the most ridiculous and the most fraught with fraud. While there is no doubt that certain physical affections are modified by mental conditions existing in the individual, to suppose that they may be in any way changed in their character by the mental state, or by the simple volition, of another, is a supposition too absurd to be for a moment entertained. Every practitioner knows that he can influence his patient by his own mentality when in his immediate presence, but these impostors claim the power not only of exerting the same influence in spite of the interval of even miles of distance, but also of exerting at the same distance a special therapeutic power. For the physician to ignore the power within him to influence his patient, would be for him to neglect a very important agent which it is legitimate for him to avail himself of, but this admission cannot be tortured into an endorsement of the "mind cure" as it appears before us in these later days.

Touching the legitimate employment of the mind as a medium through which to influence the body, the Weekly Medical Review pertinently says:

What physician under the sun but what practices the so-called mind cure in every case he sees. It is simply another instance of what we have already stated as the province of any regular physician, to use any and every means in his power to cure his patient. A physician walks up to the bedside of the sick one with an Hippocratic expression on his face, of woe and despair, and in gloomy, lugubrious tones and words, informs him that he is afraid there is no hope. All this would, no doubt, have a strong tendency to remove any small fears that the patient might have had, and would cheer him up and place his mind in a favorable condition to influence his disease.

But another physician, possessed of that magnetism which flows from him involuntarily, drawing all whom he meets irresistibly toward him,—a magnetism which cannot be cultivated by a nature in which it is originally non-existent,—possessing beside, a temperament which causes everything to present its bright aspect to him, need only present himself before the patient, when the quickening expression, the brightening eye, and all the nearly imperceptible changes which betoken renewed vigor, indicate the effect which this magnetic influence has had upon him.

As is often heard from people who have the fullest confidence in an old time-tried physician, "it makes them feel better as soon as he steps into the room."

Is this mind cure? Call it what you will, we are all conscious of the existence of this power; we all exercise to the fullest extent to which we are able, and none who possess it could impart the least iota of it to another. Then what matters it, what name we give it, or under what profession we exercise it; for it is not only in medicine that this is an active power; its force, not realized perhaps, exerting itself in the attainment of success in every line of life, and, unconsciously to ourselves, molding and shaping the course of all earthly human events.

Why was it, that the recognition of the effect of this power gave birth to a new sect, practicing its tenets according to an old method, only under a new name, that of mind-cure?

The reason is sufficiently obvious. The world and its inhabitants are always seeking something new; it is "variety" which gives "spice to life," and in their attempt to gain it, they rush about, first here, then there, trying one thing and then another, a never-ceasing struggle which leaves them utimately just where they began, still seeking something new. To those who lack the true instinctive recognition of all that is right, this state of affairs affords ample opportunity of getting together as a sect, and under the protection of a name which affords them security, that of *Christian* faith-healers,--reaping the benefits of it unquestioned and undisturbed.

Who denies the power of one mind over another? Although not tangible, its effects are as evident as those of the winds on the trees, bending and swaying them to their lightest will. Who but can also recognize that this power, like all others, must have a limit, and when it is over-exerted, must reveal its weakness by failing to accomplish what it undertook. Were the mind-cure practiced within its limits, and without the miserable attempt to shield itself under a Christian garb, the results would be of unquestionable benefit.

But when it claims to grasp within its capacious bounds the length and breath of all diseases, curing nasal catarrh equally with hysteria, its fallacy must be apparent, and its life, as such, of short duration.

WAS IT HYDROPHOBIA.

A very singular case occurred near this city about two weeks ago. A mare belonging to a farmer was seized, after a couple of days' "dumpishness," with violent paroxysms of rage and excitement. She attacked with heels and mouth every thing animate and inanimate which she could reach. After demolishing her stall with her heels she would seize the boards with her teeth and spend her rage on them. When the boards were removed she attacked her own body and tore the skin and flesh from her sides. A hired man on approaching her was attacked and barely escaped her mouth and fore-feet. Her owner, of whom she was ordinarily very fond, then attempted to pacify her and in attempting to seize her by the halter was seized with her teeth by the back of his hand, and the entire skin removed. She was then killed by a blow from an axe, under the supposition that she was suffering from hydrophobia. Sections of the medulla were removed for the purpose of experimenting on other animals, and the owner immediately took passage for Paris, whither he has gone to consult PASTEUR. The dogs and rabbits which have been inoculated have not as yet shown any symptoms of hydrophobia, and no unfavorable news has been received from the owner. The conduct of the mare was scarcely identical with that of the dog suffering from rabies, which fact taken in connection with the *post mortem* appearance of the brain, make it probable that the brute was suffering from phrenitis. The immunity from hydrophobia which the victim of the bite will probably enjoy after Pasteurization will not, therefore, be accepted as proof of the value of the treatment.

In connection with the above the following quotation from DR. SHAKESPEARE, the pathologist, is of interest: "In view of the experimental evidence which we possess at present and of many unassailable observations of many surgeons and veterinarians, there seems to be ample warrant for the admission that not infrequently tetanus in man is acquired directly and indirectly from some of the domestic animals, notably the horse, which surround him.

CHOLERA AT NEW YORK.

Just as the public were commencing to breathe easily over the anticipated development of the germs of Asiatic cholera, which it has been supposed have been transported to the country within the past two years, the steamship Alesia, from Naples *via* Marseilles, brings to the port of New York several cases of the dreaded disease. While the improvements in sanitary science since the last epidemic of cholera in this country, have made us confident that such epidemics are things of the past, the occurrence of the cases referred to have, nevertheless, been sufficient to spread considerable alarm. Fortunately, the importation occurs at a season when the germs are less apt to multiply and find fresh foci than during the warmer weather. The careful quarantine to which the patients, and the thorough disinfection to which their baggage have been subjected, will, doubtless, prevent the spread of the discase. Still the occurrence of these few cases should incite to a careful inspection both of one's premises and of himself with a view to removing the conditions under which the germs of the disease best thrive. The occurrence of the cases on a boat from Marseilles proves, moreover, that the spot which was supposed to be freed from the contagion still requires to be avoided by vessels coming to this country.

The Marine Hospital department has taken cognizance of the cases referred to, and it will meet the threatened invasion with the most approved means of prevention.

Notes.

A female physician contributes a note to the Medical and Surgical Reporter on a subject of great practical importance, but extremely delicate to handle in print: the conjugal question in its relations to the health of the woman and her progeny. Men, she says, have been taught to consider marriage as the opportunity expressly provided for the lawful indulgence of passion, sanctified by church and society, and a wife as an orthodox and respectable exchange for a prostitute. This is terse language, but, if the facts justify it, perfectly excusable in a medical journal. The writer points to the superiority in the physical and mental strength of "love children" as compared with that of the children born under the best "social" conditions, in support of her proposition that intercourse submitted to from a mere sense of conjugal duty is unnatural. The offspring of illicit passion, she holds, has nature on its side, but that resulting from a mere indulgence of a habit—often a matter of indifference or positive distaste to the mother—comes into the world handicapped. She holds that nature having endowed both sexes with natural passion intends that gratification on the part of one must meet with response on the part of the other, in order to the highest breed of men. The subject, as we have said, is a delicate one, but the writer handles it with considerable dexterity.

Impressions of the Congress are now going the rounds and almost everybody who is anybody feels himself bound to tell what he thinks of the great event. Some thoughts accompanying impressions of DR. DOLAN, editor of the

Provincial Medical Journal of Halifax, England, and given in the Medical Times of Philadelphia, are of interest: Each Congress has an individuality stamped on in by the nationality organizing the meetings, and each nation must do its work of organization and reception in its own way. Comparisons between Congresses are, therefore, impossible. Each must stand by itself. The progress of medicine in a country is not to be measured by a few specialists or eminent leaders, but by the number of educated practitioners it possesses. At all Congresses there is a good deal of chaff mixed with the grain. The London and Copenhagen transactions have only to be consulted to prove this. The general average of the papers read (at Washington) was fixed at as high a standard as is usual at meetings of this kind. The accident of where a man lives is too weak a one to base upon it any argument as to medical ability. What a man has done is the only test in assigning a place in the hierarchy of medicine. The steam engine and electro-motor power have annihilated space, and provincialism is dead.

It was stated in the Medical Register (DR. JOHN V. SHOEMAKER, editor) that DR. I. MINIS HAYS, of the Medical News, was the author of certain dispatches sent from Washington to the Press, of Philadelphia, which dispatches were not complimentary to the International Medical Congress. The managing editor of the Press meets this charge with a very flat footed denial, and absolves DR. HAYS from all responsibility for the dispatches. They were sent, he says, by two regular correspondents whose identity was absolutely unknown to DR. HAYS. It now remains for DR. SHOEMAKER to produce his warrant for such a serious charge against a member of the profession.

At the meeting of the Congress, a lady accompanied her husband to the registrar's desk, and when he received his badge she was so struck with its beauty that she inquired if she might not have one. "On the strength of what title do you ask one?" was demanded by the urbane registrar. Quick flashed the response: "Oh, I am the doctor's wife, and, besides, I am an M-A-M-A" It is needless to say she was promptly decorated. This title is an open sesame to all gatherings of doctors.

MRS. CLEVELAND is said to have declared regarding the doctors to whom she and her husband gave a reception on the occasion of the Congress, that "they presented a degree of respectability, in appearance and deportment, far surpassing any other similar body of gentlemen she had ever met." It is needless to remark that MRS. CLEVELAND is a lady of most excellent judgment, and that there is a glorious future is store for her.

DR. ALONZO CLARK, of New York, aged 80, and DR. RICHARD QUAIN, of London, author of Quain's Dictionary, aged 71, are the latest deaths of prominent men in the profession. Their lights have gone out in darkness for ever, and where are they? Their works, however, will live after them for many years, but the relation which they bear to their source will soon be forgotten. Truly the individual man is a small part of the stupendous whole.

Differences of opinion are being expressed by foreign medical journals touching the degree of success of the Congress. Of the British journals the British Medical Journal thinks it was a failure, and the Lancet votes it a success. Of the home journals those who predicted a failure hold that their prophecy was fulfilled, while those who hoped for success are satisfied with the result.

DR. WOODBURY has associated with him DR. WAUGH and the two have assumed the joint editorship and proprietorship of the Philadelphia Medical Times. Of their ability to edit the journal there is no doubt, and we trust that the proverbially poor business qualifications of doctors may find in them a bright and shining exception.

"My dear sir," remarked the doctor to the husband, "your wife is in a really critical condition, and I think some specialist should be called as counsel in the case." "There, now," was the reply, "I was right again. I told my wife long ago that she ought to get proper medical treatment, but she thought you might be offended."

The French do not like Berlin as the next place for holding the International Medical Congress, and attribute the selection to the fact that German delegates were aided in their efforts to secure the next place for holding the Congress, by the many American-German physicians who attended the Washington meeting.

What should accompany old age? asks a contemporary, who answers "honor, love, obedience and troops of friends." These are certainly desirable, but what are they all to the old man who has an enlarged prostate. In too many instances a catheter should accompany old age.

A contemporary speaks of micro-orgasms. They must be very unpleasant things to have in a family. Micro-organisms are sometimes quite bad, although bearable, but heaven forefend us from micro orgasms.

A lady who was a greater joker, notwithstanding her protracted painful illness, sent word to her doctor, who had just announced himself, that he must excuse her, as she was not feeling well enough to see him that day.

Book Notices.

A Manual of the Physical Diagnosis of Thoracic Diseases, by E. Darwin Hudson, Jr., A.M., M.D., late Professor of General Medicine and Diseases of the Chest in the New York Polyclinic; Physician to Bellevue Hospital, etc. One volume. Octavo. 162 pages. Nearly 100 illustrations. Muslin. Price, $1.50.
New York: Wm. Wood & Co.

This posthumous volume, we are told, is the outcome of the author's needs as a teacher in the New York Polyclinic. The manuscript thereof had just been completed when the author died. It requires but a superficial examination to convince any one that the writer was a close observer and thoroughly conversant with his subject. If a new work on this subject was required, this certainly meets the demand very fully. It possesses the merit of fullness without verbosity—a something very essential in a work of this nature. It deserves a large sale and certainly if every practitioner who is not supplied with a work of superior merit, were to invest in a copy of this the sale would be very large.

A Reference Handbook of the Medical Sciences, Embracing the Entire range of Scientific and Practical Medicine and Allied Science. By Various Writers. Illustrated by Chromo-lithographs and fine Wood Engravings. Edited by Albert H. Buck, M.D., New York. Volume V.
New York: William Wood & Co.

This volume of what is, in many respects, the greatest work ever issued from the medical press, in this country at least, quite sustains the reputation which its predecessors have already achieved for it. It contains an exhaustive article on every medical subject, and subjects akin thereto, whose names commence with the letters of the alphabet between "M" and "Q." The fact that the volume is a double-column royal octavo of 812 pages of solid brevier will convey some kind of an idea of the exhaustiveness with which it treats its subjects The work is a medical encyclopædia and is a library in itself. We have dilated more extensively on its merits in our notice of preceding volumes.

A Handbook of General and Operative Gynecology. By Dr. A. Hegar and Dr. R. Haltenback.

Diseases of the Female Mammary Glands, by Th. Billroth, M. D., of Vienna, and New Growths of the Uterus, by A. Gusserow, M. D., of Berlin. Illustrated. These two works constitute Vol. IX. of the "Cyclopædia of Obstetrics and Gynecology," 12 volumes. price $16.50, issued monthly during 1887.
New York: Wm. Wood & Co.

These books are, respectively, volumes VII and IX of the Cyclopædia of Obstetrics and Gynecology being issued in monthly parts during the current year. While we in this country have little to learn from foreigners touching the practice of gynæcology, we may consult them with advantage on the subjects embraced in volume IX. The authors of this volume stand out in advance of all others on the subject on which they therein write.

Lessons in Gynecology. By William Goodell, A. M., Professor of Clinical Gynæcology in the University of Pennsylvania, etc. Third Edition, thoroughly revised and greatly enlarged, with one hundred and twelve illustrations.
Philadelphia: D. G. Brinton, 115 S. Seventh St.
Detroit: John Mac Farlane.

This book, we are told, is not a complete treatise upon the diseases of women, but mainly the outcome of clinical and of didactic lectures, delivered to the third-year students of the Medical Department of the University of Pennsylvania. The previous editions of it have been received with much favor, and the present differs from them in that it has been carefully revised and such additions of new matter made as have been rendered necessary by the progress of the science. Six new Lessons have been added, together with twenty illustrations. Dr. Goodell is well known both as a gynæcologist and as a writer, and ranks very high among his contemporaries in both capacities.

The author roundly condemns the practice which has had many advocates of late years, of early rupturing the membranes in labor, holding this practice as one of the most fruitful causes of laceration of the cervix, which forms so large a percentage of the ills of the modern woman. This early rupture certainly shortens the course of labor, but, Dr. Goodell remarks, it is the accoucheur's duty to deliver safely rather than quickly. Let the membranes alone until the os has been fully dilated. This advice holds with greater force in first labors in which rents of the cervix most frequently occur. This is excellent advice and should be deeply graven on the mind of every man who takes on himself the weighty responsibility of the obstetrician.

The work bears evidence of the author's close relation to Dr. S. Weir Mitchell, to whom the book is dedicated, in that the nervous disturbances of the woman are taken careful cognizance of. It is in this field that Dr. Mitchell has made his mark, and it were well that the influence of his teachings were as decided among gynæcologists generally as it is in the case of the book before us.

The book is one of a superior order of merit, and if the careful conservatism which breathes through it were widespread, the benefits to suffering woman would be very great.

MASSAGE, PRINCIPLES AND PRACTICE OF REMEDIAL TREATMENT BY IMPARTED MOTION. MECHANICAL PROCESSES. By George H. Taylor, M. D., Author of "Health by Exercise," "Health for Women," "Pelvic and Hernial Therapeutics," etc.
New York: John B. Alden.
Detroit: John MacFarlane.

The activity of publishers in their issue of treatises on massage cannot have escaped the attention of the profession. The lesson which it teaches is obvious: this method of treatment is gaining in popularity and the demand for instruction therein is increasing. The response to this demand in the present instance is characterized by a combination of conciseness and perspicuity. It presupposes some knowledge of anatomy and physiology, and is thus useful only to the physician or the intelligent layman. To such we can consistently commend it.

Therapeutic Brevities.

PRURITUS OF THE FEMALE GENITALS.—The following formula is recommended by Meigs for pruritus vulvæ:

℞ Boracis, ʒ iv.
Morphinæ hydrochlor, gr. vi.
Aquæ rosæ, ʒ viss.
M. Sig.—Bathe the parts affected.

Between the applications, lycopodium or starch flower may be dusted upon the affected parts.

VANEEDEM'S prescription is:

℞ Chloroformi,
Sulphuris,
Sodii carbonatis, ää ℈ iv.
Morphinæ acetatis, gr. vi.
Vaselini, ʒ v.
M. Ft. ungt. Sig.—Rub upon the parts.

LEBERT'S formula is as follows:

℞ Hydrargyri bichlor., gr. viij-gr. xvi.
Spt. camphoræ, f ℥ viiss.
Aquæ destill., f ℥ x.
M. S.—Bathe twice daily with the lotion.

For pruritus of the perineum, HANCKE gives the following prescription, to be applied by the means of a sponge every two hours. For pruritus of vulva, dilute four-fold:

℞ Iodi, gr. xv.
Potass. iodidi, gr. xl.
Dissolve in aquæ dest., f ℥ v.
Add alcohol dil., ʒ viiss.

PLEUCK'S salve for pruritus pudendum is made of the following:

℞ Ungt. hydrargyri nitratis, ʒ viiss.
Hydrargyri oxidi rub, gr. xx.
Adipis, ʒ iv.
M.—Ft. ungt.

CAZENAVE prescribes:

℞ Zinci oxidi, ʒ ss.
Camphoræ, gr. viij.
Amyli, ʒ viiss.

DR. THOMAS, in cases of pruritus due to vaginal leucorrhœa, advises vaginal injections of the biborate of sodium in solution, and once or twice a week he cleanses the cervix thoroughly of mucus, and applies the nitrate of silver occasionally; chemically pure nitric acid is used with the hope of altering the secretion. Copious injections of water are continually used, and a suppository of cocoa-butter containing gr. v of tannin or gallic acid, is placed against the cervix twice daily.

TROUSSEAU recommends a solution of carbonate of potassium (ʒ iii and f ℥ iv) for pruritus vulvæ. A formula advised by FOX is as follows:

℞ Acetate of ammonia ℥ j.
Dilute Prussic acid, ʒ iss.
Infusion of tobacco, ℥ viij.
M. Sig.—To be sponged on the part twice a day in pruritis ani or p. vulvæ.—*Med. and Surg. Rep.*

TREATMENT OF HEPATIC CONGESTION.—JULES CYR gives (Rev. de Thérap.) the following rules for treatment of the above: 1. Application over the liver of compresses of cold water, often renewed; two or three leeches about the anus. 2. At evening, ⅛ of a grain of calomel should be taken, followed the next morning by five drachms of Glauber's salts. 3. As beverage, milk and Vichy water, or 75 grains of ammonium chloride in a quart of water. A douche, while the patient is reclining, of water at a pleasant temperature, given over the hepatic region.

OINTMENT FOR SEBORRHŒA.—The Med. Summary gives the following (Bronson's ointment) for seborrhœa:

℞ Hydrarg. ammon., gr. xl.
Hydrarg. chlor. mit., gr. lxxx.
Vaseline, ℥ j.
M.

OINTMENT FOR SCABIES.—

℞ Napthali, pts. 15.
Saponis virid, pts. 50.
Adipis, pts. 100.
Pulv. cretæ, pts. 10.

M. One application of the above is said to be effectual. No bath is required previously, and the skin is left in good condition.

Medical Progress.

TREATMENT OF ABORTION IN PARIS.—The Paris correspondent of the Medical Times gives the following method, used in the Paris hospitals, as the most popular plan there in the treatment of abortion:

First, as to its preventive treatment. The rule given is, "As long as an abortion is not completed—that is, the products of conception expelled—attempt may be made to prevent it." This is not a rigid rule, however, for certain cases are inevitable; as, for instance, when the fœtus is dead. When the membranes are broken and the amniotic fluid has escaped, it is almost inevitable, but not certainly so; because several cases are known where the fœtus has been carried to term when the waters had been lost weeks before. There is no reason to consider an abortion inevitable because there is hemorrhage, and even when in the blood discharged one can recognize portions of the decidua, for pregnancy has been proved to have gone on without it. Even when the os uteri is dilated and a portion of the embyro protrudes, hope may still exist.

The preventive treatment can be summed up in two formulæ: 1st, require absolute rest, with dorsal decubitus in bed, never on the sofa; 2nd, diminish the uterine irritability by opium. Laudanum may be given by rectal injections. Twenty drops are first tried in one-quarter pint of water; this is increased to forty, fifty, sixty, and up to a hundred drops in the same quantity of water per twenty-four hours. Pregnant women possess considerable tolerance for opium, and hypodermic injections may also be given when rapid action is needed. The above simple treatment is all that is used here, anæsthetics and chloral not being in favor.

When the abortion is inevitable the treatment is different. It must be divided into the treatment of an abortion of the first eight weeks, and those of the third and fourth months. As to the first, the indication is to fight the hemorrhage, and the simplest treatment is the best. It mostly consists of absolute repose and expectation, and there is a good deal more to say as to what ought not to be done than what ought to be done. As to the first, one ought *never* to use applications of perchloride on cotton in the vagina, on account of the blood forming clots which are difficult to detach, and which may cause septicæmia, or at least complications such as metritis or perimetritis. As to ergot, all the Paris accoucheurs have made a rule never to give it as long as any thing remains in the uterus. As to the other forms of internal medication, they are considered worse than useless. There is therefore but very little done except to keep up perfect antisepsis Every four hours an injection is made into the vagina, of a solution of boric acid (three or four per cent.) of corrosive sublimate (one to three thousand). Besides this, the vulva is covered with borated cotton (the only dressing used at the maternities here); carbolized cotton is liable to produce burns that are very painful to delicate skins. When the hemorrhage is very severe, the means used are two: first injections of hot water (intra-uterine if the vaginal are not sufficient). These are made with sublimate as a rule, unless they produces diarrhœa symptoms, when it is changed to carbolic acid solutions. One part of corrosive sublimate to six thousand of water is usually enough, unless there is danger of septic infection; then as much as one to two thousand is used. The temperature should be 43° or 44° centigrade. If the vulva become painful from irritation of the liquid, use the following application: vaseline, one hundred grammes; boric acid, ten grammes. Have the boric acid well pulverized and well rubbed, or it will form hard lumps in places. If the flooding still continues the only means left is to use the tampon invented by LEROUX, of Dijon. In using the vaginal tampon, many have no idea of the quantity of material that should be prepared beforehand. PROFESSOR PAJOT used to say, "Remember to have as much as would fill a high hat," and this is no exaggeration at all. Some twenty to thirty large lumps of sublimated cotton are prepared, each one tied with a long piece of string, and one by one are introduced, filling the vaginal cavity until it extends back to the ischium. It must not be forgotten to be sure to have the bladder and rectum empty before commencing. The tampon is never allowed to remain for more than twelve hours.—*Courier Record of Medicine.*

TREATMENT OF CONGESTIVE HEADACHES.—DR. WM. C. GLASGOW, of St. Louis, in a paper read before the American Laryngological Association, gives a number of cases to show the efficacy of his method of treating the headache which so frequently attends congestion of the nasal chambers. In his paper he speaks as follows:

In some cases there is a periodical return after a longer or shorter interval, the life of the sufferer is rendered almost intolerable, and he is unfitted for any mental or physical activity. If we analyze this pain, we shall find that it is distinctly of two kinds. The one kind gives a dull, heavy sense of fullness, with occasional throbbing over the temple. The other is sharp, lancinating pain so generally recognized as neuralgia.

At times both varieties of pain are present in the same case; in others they are entirely distinct. In the one case we recognize a fulness or local increase of the tension of the vessels; in the other a distinctly disordered nerve action. Both varieties are often due to the same pathological condition of the nasal chambers, and the relief of the one is often by a cessation of the other. I do not, however, in this paper propose to consider the nasal reflexes which are now attracting so much attention, and which are distinctly neuralgic in character, but the pain and sense of constriction arising from an over-distension of the vessels.

This disturbing cause is seen in frontal headaches, brow-ache, or so-called catarrhal headache, radiating from the root of the nose; it may be limited to the forehead; it may be felt as a dull, throbbing pain in the temples; it may give rise to intense dull ocular pain, or, extending over the head, it may be felt in the occipital regions, occurring frequently from cold or exposure; we also find it often conjoined with certain vaso-motor disturbances of the mucous membrane. It is frequent at the men-

strual epoch, coincident with a turgescence of the cavernous bodies, and it is the cause of many of the so-called nervous headaches, or uterine headaches, with which a similar condition of the cavernous bodies will be found. If we examine the nasal chamber during the attack of congestive headache, we shall find the cavernous bodies in a state of tension; they may not be greatly swollen or enlarged, but to the eye the condition of the mucous membrane is that of tension and fullness. The degree of tension corresponds in a measure with the severity of the headache.

A few years ago, I treated these cases with hot alkaline sprays, gently applied, and the use of hot fomentations, combined with the use of the usual constitutional remedies. This mode of treatment has not been altogether satisfactory, and during the past four years I have substituted for it the local abstraction of blood, for which I can allege unqualified success. In many cases there is experienced an immediate relief of the pain, and in all there is a sense of the loosening of the constriction. A simple bleeding may relieve the headache, or it may have to be repeated in a day, a week, or a month. I have seen but few cases which were not permanently relieved by a bleeding repeated from two to six times.

To produce the bleeding no cut is required. The cavernous body is simply pricked, and the blood flows freely until the excessive tension has been reduced; then it ceases. The amount of blood drawn rarely exceeds one ounce, in many cases it is less than this, and in some cases a single drachm of blood removed will give the requisite relief. In cases of excessive congestion the flow will equal several ounces before it ceases, the quantity of blood being dependent on the distension of the vessels, and corresponds with the severity of the symptoms. From a normal membrane, or where there is an excessive vascular distension, scarcely a drop of blood will flow from a simple puncture of the membrane such as would produce a free flow in this pathological condition. In cases where the mucous membrane is thickened, a sharper puncture will be necessary to bring blood. A lance-headed probe may be best used in making the puncture, although a sharp-pointed bistoury, or any pointed instrument, will answer. The probe has the advantage that it does not excite the apprehension of the patients, many of whom become nervous at the sight of a knife, and dread the idea of being cut.—*Weekly Med. Review.*

STENOCARPINE.—DR. KNAPP sums up the results of experiments with the new anæsthetic, stenocarpine, as follows:

From the preceding and DR. CLAIBORNE'S observations, it follows that DRS. GOODMAN and SEWARD have presented us with a new local anæsthetic that is very similar to cocaine, chiefly differing from it by its more powerful and lasting mydriatic property. This difference determines its range of applicability.

1. Everywhere, when dilatation of the pupil is desirable—*i. e.*, in all conditions that have a tendency to congestion and inflammation of the iris—stenocarpine, either alone or in combination with atropine, is beneficial, and preferable to cocaine.

2. Though its mydriatic effect be less persistent than that of sulphate of atropine, stenocarpine may be used with more advantage when in iritis there is increase of eye-ball tension, a tendency to glaucoma, and when there is great pain. Further observations have to show whether or not stenocarpine, as other mydriatics, leads to granulations of the conjunctiva. If it does not, it will be very valuable in cases of chronic iritis.

3. Stenocarpine is inferior to cocaine when we want anæsthesia without mydriasis, as is the case in the majority of operations—removal of foreign bodies, paracentesis and incision of the cornea, iridectomy, extraction of cataract—more especially when in this operation the iris is spared—operations on the conjunctiva, the lachrymal apparatus, and the eyelids. For an ophthalmoscopic examination, homatropine will be preferable.

4. If we want to be certain of a complete paralysis of accommodation, for which stenocarpine is as reliable as sulphate of atropia, stenocarpine deserves preference because its action lasts only half as long.

5. Applied externally to an unbroken cutis, it produces no anæsthesia. Observations to the contrary mentioned by GOODMAN and CLAIBORNE must be owing to peculiar conditions which further experience has to determine.

6. Small doses (four drops) rapidly absorbed may produce transient general symptoms—pallor of the skin, cold perspiration, dizziness, stupor, fainting, nausea, and weakness. The same symptoms are produced by cocaine.

7. Larger doses cause the most alarming general symptoms—violent tetanoid convulsions, opisthotonus, dilatation of the pupils, excessive acceleration of pulse and respiration and prostration.

8. Introduced into the veins, stenocarpine is the strongest poison, causing death almost instantly by arrest of respiration and pulsation.

9. It is certainly dangerous to inject even small quantities into vascular tissues, such as the orbit, for instance; it appears even unsafe to inject it under the skin in quantities exceeding ten minims of a two per cent. solution—*i. e.*, about 0.01 ($\frac{1}{6}$ grain). We should also be on our guard if we apply it to an open wound during the progress of an operation.

10. The symptoms of poisoning, as has been seen from the above description, are like those from strychnine. The affinity of the two substances should be further investigated. The chemical tests for the detection of strychnine applied to stenocarpine have proved negative. The reflex excitability from stenocarpine is less than from strychnine, also its toxic effect is considerably less. I instilled into the eyes of a rabbit four drops, and into one eye of another two drops of a two per cent. solution of nitrate of strychnine. Both animals died from tetanoid convulsions in ten minutes. Ten and fifteen minims of a two-per-cent. solution of cocaine injected into the orbits of rabbits had no general effect.

The alkaloid stenocarpine was separated by DR. SEWARD from the leaves of a tree growing in Louisiana, called the "Tear Blanket Tree." From its likeness to the Acacia stenocarpo he dubbed it stenocarpine.—*The Med. Record.*

CHRONIC INCONTINENCE OF URINE OF CHILDHOOD.—The chronic enuresis which occurs in childhood and early adolescence has not received the attention that it merits. This must be in part because parents are apt to think the child will outgrow the weakness, and in part also because the physician knows that treatment is often ineffectual, and therefore is not desirous of inviting failure by beginning treatment. In about half the cases, the disease is accompanied by some local pathological condition of penis, or of the rectum. The most frequent local disorder is an adhesion between the glans and prepuce immediately in front of the corona. This varies in degree from a slight adhesion on one side of the glans, to one encircling the entire glans for about one-eighth to one-quarter of an inch in front of the corona. A greater degree than this is rarely seen. Other less frequent local disturbances, which may also co-exist with the first named, are phimosis, a long pendulous fore-skin, hypospadias, and a rectum impacted with fæces. Boys have been known to go two weeks, and longer, without defecating, and to be constipated to this extent quite regularly.

While local disturbances, varying in kind and degree, are to be met with in most patients, there are a number of cases which present no local manifestation of disease. In some of these the cause must be sought in the urine, and in others in organic or functional disease of the nervous system. Except in those patients who urinate at night under the influence of a dream, which makes them seem to be in the water-closet—except when, in other words, the trouble seems to be psychical — cases of enuresis of nervous origin are very rebellious to treatment. On the contrary, where there exists a local tangible lesion of the penis or adjacent organs. the prognosis is much better.

In a recent paper before the Medical Society of the District of Columbia, DR. ADAMS apparently recommended circumcision in all cases of redundant prepuce, whether this was associated with phimosis or not. Doubtless, his experience has been a large one, or he would not speak so positively. He states that he has only known one instance in which enuresis persisted after circumcision, and in that case there was reason to suspect stricture of the urethra as a sequel of gonorrhœa. In the course of the past year in a large institution for boys in Philadelphia the result of treatment in twenty-five cases was reported. One of these was a boy (9 years old) who had been circumcised, but, as far as could be determined, without improvement of the enuresis; while those due to phimosis, or, to speak more exactly, those accompanied by phimosis and adhesions, sometimes with priapism, showed the best results. The adhesions were broken up painlessly by the previous local application of cocaine, and the parts were annointed with olive oil. The best internal remedies were belladonna, the bromides, cannabis indica, ergot, strychnia and digitalis. In cases in which constipation was a prominent symptom, cascara sagrada with belladona proved of greatest service. Their relative merit is fairly indicated by the order given. Suitable combinations of these drugs for special indications will readily suggest themselves to the practitioner.—*Medical and Surgical Reporter.*

ON THE EMPLOYMENT OF KEFIR IN THE DISEASES OF CHILDREN.—We learn from the Austrian correspondent of the Semaine Médicale that PROFESSOR MONTI, of Vienna, employs kefir with excellent results in the diseases of children. He uses for this purpose pure cow's milk.

For infants under three months, the milk employed for the preparation of kefir should be diluted with equal parts of water. For infants between three and seven months, a mixture may be made of two parts of milk and one part of water; and for children between seven and fifteen months, the preparation should be three parts of milk and one part of water.

The kefir is prepared in the following way: A quantity of kefir grains is soaked five or six hours in warm water, then put into a glass of milk, where they are left till they rise to the surface of the milk become white, which takes two or three hours. A tablespoonful of the grains thus prepared is added to a pint of milk, which is then covered with a cloth; the mixture is shaken or stirred every two hours for eight hours, and kept at a temperature of from 63° to 65° F. The milk is then poured into a bottle which is hermetically sealed, and exposed to a temperature of 63° to 65° F.; the bottle is shaken every two or three hours. The kefir thus prepared differs according to the length of time the fermentation has been going on. Kefir No. 1 is the product of twenty-four hours fermentation. It is a thick drink, slightly acid, containing but little alcohol and carbonic acid. Kefir No. 2 is the product of two days fermentation. It is sourer, thicker, and foams in the glass. After a fermentation of three days (kefir No. 3) the richness of kefir in alcohol and carbonic acid is still greater.

There is another very simple process of preparing kefir, namely, by mixing equal parts of milk and kefir, prepared in the way indicated above, and shaking the mixture several times a day. In adding to milk a small quantity of kefir a beverage is obtained at the end of two or three days, equivalent to kefir No. 1 or 2.

LEVY has recently prepared a Koumiss almost identical with kefir, by adding curdled milk (bonny-clabber) to eight or ten parts of boiled milk, and repeatedly shaking the mixture, then exposing it to a temperature of 54° F. According to MONTI'S analysis, the quantity of alcohol and carbonic acid contained in this beverage is less than that in kefir No. 1, and he regards it as quite different from kefir. The physiological action of kefir is due to the presence of lactic acid, carbonic acid, alcohol and peptones.

Infants soon learn to like kefir, and take it readily, seldom vomit it, the healthy action of the digestive canal and the kidneys is promoted by it, and the weight of the body augmented.

Kefir grains come from the Caucasus, and the preparation of koumiss from kefir is familiar to the populace of Eastern Europe.—*Med. and Surg. Reporter.*

THE UTILITY OF INTESTINAL ANTISEPSIS.—DR. D. N. KINSMAN has published an interesting paper in the Journal of the American Medi-

cal Association in which, on scientific grounds, he urges the utility of antisepsis in various intestinal complaints. Summing up the results of the researches of BOUCHARD and DAMASCHINO, he attaches great importance in the pathology of intestinal affections to the phenomena of fermentation and putrefaction of which the intestinal canal is the seat, and of which the principal agents are certain micro-organisms. Products such as indol, skatol, phenol, divers ptomaines, are the result of the action of bacteria. The meconium of new born babes does not contain them, nor are they met in the normal discharges of nurslings. The urine of the newly born, and of infants nursed exclusively at the breast, contains no indican; but as soon as the babe is fed on a mixed diet, then the numerous bacilli appear in the stools, and indol and indican in their urine. These bacilli, which are the cause of putrefaction, engender poisons which are normally destroyed, or stored up in the liver, excreted by the kidneys, and even by the intestines. When from any cause the functions of the liver are interrupted, the bile no longer being poured into the intestine and exerting its antiseptic action, these toxic products of bacillary elaboration (ptomaines) augment in the alimentary canal and poison the blood. The action of mercurials, which heretofore has not been well understood, is now made plainer in the light of these facts; they evidently play an antiseptic role, in arresting morbid fermentations and destroying bacteria. They also neutralize the ptomaines, and thus prevent self-poisoning, and by their cholagogue effect on the liver they indirectly have the same result. In answer to the question: "How may one determine the necessity for intestinal antiseptics?" the writer remarks, that one indication is the presence of indican in the urine.

DR. KINSMAN in pursuance of his inquiries in this direction has made a series of experiments on the discharges of patients affected with cholera nostras and cholera infantum. He has invariably found in these stools enormous masses of bacilli, and the examination of the urine revealed the presence of indican. The green discharges of infantile catarrh of the intestines also contain bacteria in abundance, and here DR. KINSMAN'S observations agree with those of PROF. HAYEM, who, however, claims to have isolated the specific bacterium which causes the green discharges.

It is worthy of note that the success which attends the antiseptic treatment of these intestinal affections—and the markedly bactericide agents such as creosote, resorcin, salicylate of soda, corrosive sublimate seem to be more and more coming to the front in the therapeutics of intestinal ailments—confirms the views which have above been stated—*Med. and Surg. Reporter*, Sept. 18, 1887.

ANTIPYRINE HYPODERMICALLY AS A SUBSTITUTE FOR MORPHINE.—PROF. GERMAIN SÉE in the first place used this drug hypodermically in order to increase the rapidity of its action and to spare the stomach. The great solubility of antipyrine in distilled water allows of its hypodermic use; a half gramme of antipyrine in as much water constitutes a dose, and about represents the volume of a PRAVAZ' syringe. The injection, which is performed just as one would inject morphia, after first causing a painful feeling of tension for a few moments, relieves the pain very quickly. Antipyrine as an injection, does not present any of the inconveniences almost constantly provoked by the use of morphia, such as vertigo and nausea, nor does it put the patient to sleep; it does not lead to morphiomania, and moreover, besides its soothing action, exercises a curative effect which the morphia does not possess. PROF. SEE gives a number of cases, under his own observation, among others, a series of acute articular rheumatism, cured by two to three injections of one-half gramme of antipyrine, aided by its prolonged employment internally in three-gramme doses. Also a case of gout, favorably modified by the use of antipyrine. Among neuralgias he mentions, three of tic-douloureux, one of which was several years old, and a number of lumbagos. He also also recommended its use, hypodermically and internally, in the treatment of hepatic and nephritic colic, in painful cardiac affections and in dyspnea occurring in asthmatics. In cases of biliary calculus, generally treated with morphine hypodermically, the pain is relieved for a time, but the biliary and intestinal secretions are also arrested, which would in time bring back the former condition and its accompanying pain.

In a grave case of biliary calculus, the antipyrine rapidly produced a cessation of all pain without in the least provoking intestinal trouble. In two cases of nephritic colic the favorable result was the same; here the advantage of the antipyrine was all the more important, as morphine in the same way would have arrested the secretion of urine, whereas antipyrine does not in the least affect the urinary secretion. The author then gives a number of cases of angina pectoris at "Hotel Dieu" very much benefited by the injections of antipyrine, reducing the intensity and frequency of the attacks. Thus basing his opinion upon his own experience and that of several of his colleagues at "Hotel Dieu," PROF SÉE believes that at no far off date, antipyrine will entirely take the place of morphia.—*Weekly Med. Review.*

THE TREATMENT OF BRONCHO PNEUMONIA IN CHILDREN.—M. SIMON divides the different types of broncho-pneumonia into (1) the *foudroyante*, which kills the patient in two or three days; (2) the acute, which lasts seven or eight days and is very fatal; (3) the subacute, which may last three or four weeks. Whatever its type, broncho pneumonia is a most serious disease, and, according to SIMON, hardly fifty per cent. recover. The affection is one of special interest also because of its frequency and difficulty attending its differentiation in some cases from acute phthisis. The remedies that have been usually recommended in treatment are emetics, expectorants, and stimulants, together with external applications. English writers, like DR. DAY, pin their faith on ipecac wine, senega, and carbonate of ammonia. American writers lay stress upon expectorants, but recommend at first small does of calomel with bicarbonate of soda. The ammonia preparations, strychnia, quinia, and alcohol are then given. Only rarely are emetics or vene-

section used. German authors, like HENOCH, speak favorably of ipecac, wet cups, and even tartar emetic in the vigorous class (a class most likely to get well in any event). In the majority of cases dry cups, hydropathic applications to the chest, camphor, benzoic acid, infusion of ipecac root, and stimulants are to be recommended.

M. J. SIMON has recently been delivering a series of interesting lectures upon this subject of broncho-pneumonia in children. In that portion devoted to therapeutics we are struck, first, with the great change which has come over the therapeutical teachings of the French school since the days preceding the writings of MM. BARTHEZ and RILLIET (1862). Still, M. SIMON evidently does not accept the purely expectant treatment at one time advocated by the former author. In vigorous children he gives first a single emetic, not using, however, kermes mineral or antimony; neither, he adds, should such depressing agents as opium, belladonna, or aconite be given. On the other hand, some form of alcoholic stimulant should be administered, and quinine in doses of from one to four grains twice daily. The bowels should be kept open by repeated injections, or the use of magnesia or senna. External applications of mustard or fly blisters, followed by poultices, are also recommended. The temperature of the room should be equable, neither hot nor cold, dry nor moist. As an anodyne and sedative, if one is needed, chloral is advised in doses of five or six grains.

THE HYPODERMATIC USE OF ERGOTIN.—In hemorrhage inaccessible to mechanical means of arrest, the hypodermatic use of some form of ergot has proved one of the most successful of therapeutic expedients In puerperal hemorrhage the abdominal wall was chosen as the place of injection, and the fluid extract of ergot and various preparatfons of ergotin have been employed. This mode of treatment, however, is not without unpleasant results in an irritative effect of the drug, producing pain, and often abscesses.

To avoid these objectionable features, BUMM, in an article in the Centralblatt f. Gynäkologie, No. 28, 1887, strongly urges the selection of the nates as the place of injection; the needle of the hypodermatic syringe should be inserted perpendicularly in the gluteal muscles for its entire length. The muscular tissue is shown to be less sensitive and more efficient as an absorbent than the subcutaneous tissue; experiments upon animals show that twelve hours after such injections all traces of the fluid disappear, while portions of material injected into the abdominal wall remain for more than 24 hours.

A second point of importance is the choice of an appropriate preparation of ergot. BUMM believes that the strongly acid reaction of the extracts and their solutions, is an important factor in the production of the burning pain so often caused by injections. The suggestion of other writers, that the power of the drug is impaired by neutralization of its solution, BUMM did not find verified in the cases of two patients whom he treated for uterine fibroids, using in alternation acid and neutral solutions. The addition of soda to full neutralization gave a clear fluid which was perfectly efficient.

The use of too concentrated solutions is another cause of irritation. Ordinarily one part of ergotin to five of water is recommended, but much more rational is the selection of a five- or ten per-cent. watery solution. A better result is obtained from a larger quantity of a weaker solution, both as regards rapidity of absorption and continued action, than from a smaller quantity of a stronger solution. A slight sensation of burning, or tenderness on pressure, are the only unpleasant after-effects which BUMM has seen to persist, and for a few hours only, after this treatment.—*Med. News*, Sept. 10, 1887.

AMMONIUM PICRATE IN THE NEUROTIC SEQUELÆ OF MALARIA.—BRACONNET some years since reported excellent resuls from the use of potassium carbazotate (picrate) in malarial affections, and DR. H. M. CLARK has lately extolled ammonium picrate as a quinine substitute in the malignant malarial fevers of Asia and Africa.

Every remedy which promises therapeutic power as a quinine substitute is eagerly seized upon by the neurologist, because of the untoward effects of quinine and its constitutional intolerance by certain neurotic individuals.

In the malaria (which is an ever present factor to combat in the diseases of the Mississippi Valley), ammonium picrate has proven, in the writer's hands, a sufficiently salutary remedy to justify its commendation. Nervous patients, who feel cold or drowsy part of every day, or every second or third day, or who are chilled by slight causes, and those who always feel tired and who give a history of antecedent malarial affection the previous spring or fall, are often markedly benefited by a grain or a grain and a half of ammonium picrate three or four times a day an hour after meals.

It is best given alone in pill or capsule form, but may be combined with ammonia muriate or capsicum. I have given it mixed in mucilage (it is not soluble in water) combined with compound hypophosphite syrup.

Ammonium picrate has neurotic tonic power which, in my opinion, is not due to its antiperiodic influence alone, but to its power over the vital nerve centers. I have in some instances seen brain and nerve-weary, and somewhat irritable, patients become more restful and tranquil under its use. It does not act rapidly like the opiates, bromides or chloral hydrate, and I have not given it in large doses.

I have given it after a few days of quinine in nervous diseases complicated by malaria, and have found that such a procedure often yields prompt results.

If this communication should lead any brother practitioner to try ammonium picrate, the writer hopes he will favor the profession with a report of his experience.—C. H. HUGHES, M. D., in *Med. Standard* Sept. '87.

RECTAL ALIMENTATION IN DISEASES OF THE SKIN.—All substances in solution are speedily absorbed by the rectum. Medicines in the form of suppositories and powders are taken up more slowly, but are cleanly and easy of administration.

In lupus of the mouth and lips, after scraping, the rectal method of alimentation and medication is recommended.

Pemphigus and impetigo in children of all ages, are often due to alimentary disturbance, in which this method has advantages over the administration of food and medicines by the mouth.

Acne due to stomachic irritability, with vomiting, nausea, etc., can be cured in from two to four weeks by giving milk and other nutritious enemata per rectum, care being taken to insure retention. They should be lukewarm, and given only once every four hours.

Rectal medication is of value in those to whom medicines by the mouth are distasteful.

In many cases of syphiloderm the eruption disappears after suppositories of five grains of calomel or a fraction of a grain of the protiodide.

Scrofuloderma can be cured by rectal enemata of cod-liver oil, when it cannot be taken by the mouth.

Urticaria can at times be best relieved by an enema of an ounce each of castor-oil and glycerin.

Pruritus ani treated by suppository of powdered geranium in ten-grain doses acts well.

Arsenic and antimony are of great benefit in some cases of psoriasis, but they may disorder the stomach. They can then be given with care by suppository.

Iodide of potassium in small doses, in the form of suppository, prevents many disagreeable symptoms produced by this drug.—*Med. Record.*

AN ANALYSIS OF 42 CASES OF HAY-FEVER.—DR. J. O. ROE, in the N. Y. Med. Journal, Sept. 3d, 1887, from a study of 42 cases of hay-fever, reaches the following conclusions:

1. That all cases of hay-fever have their initiatory lesion in a diseased condition of the tissues of the nasal fossæ.

2. That the disease of these tissues induces, in the ganglionic centers connected with them, an abnormal activity, which is reflected to other tissues and organs.

3. That the sensitive areas in the nose are not confined to any particular locality, and that there are no zones in the nose that when irritated invariably produce the same manifestations.

4. That the direction in which the irritation is reflected is, like an electric current, always along the line of least resistance, and that from the same region it may be reflected in one direction at one time, and in the opposite direction at another time.

5. That the disease in the nose may produce disease in other portions of the respiratory tract, which may become independent centers of irritation.

6. That the affection distinctly recognized as hay-fever is due to the effect of a local irritant, brought by the atmosphere in contact with the sensitive regions of the air-passages.

7. That the affection is not *per se* a neurotic disease, nor necessarily associated with a nervous temperament, although persons having a highly nervous temperament or a neurosis are much more susceptible to the influence of a local irritant.

8. That the neurotic condition which is often regarded as a cause of hay-fever is itself often developed as the result of the local irritation.

9. That by carefully correcting all abnormal conditions found, in the nasal or other portions of the respiratory passages, and the use of such systemic medication as may be required to remove any associated or consequent general derangement, we need not fail to cure hay-fever.

AMYL HYDRATE—A NEW HYPNOTIC.—In the Therapeutische Monatshefte for July, 1887, PROF. MERING, of Strassburg calls attention to a substance known as amyl hydrate, which possesses hypnotic powers, and belongs to the group of tertiary alcohols. When a small dose was given to a frog, it produced a failure of reflex action, and finally sleep. In the higher animals, such as the dog or rabbit, deep sleep was the first symptom to assert itself, the loss of reflex action following it. The advantages which MERING claims for amyl hydrate is that it has but little effect on the circulation as compared to chloral, its chief influence being upon the respiratory system, so that in those animals to which a lethal dose was administered, death came by failure of respiration. In large doses, however, it very greatly depresses the heart, and it can scarcely be said to be a drug which can be used fearlessly.

The clinical side of PROFESSOR MERING'S paper records the use of amyl hydrate in a very large number of cases in which we are generally accustomed to use chloral. He has found it useful in delirium tremens, and has also used it with good results in the insomnia of phthisis. Generally he administers it in the form of a clyster, in a mixture consisting of seven parts of amyl hydrate, fifty parts of water, and twenty parts of mucilage of acacia. When the pain is associated with insomnia, he adds a small dose of the muriate of morphia.—*Medical News.*

COCAINE IN CATHETERISATION OF WOMEN.—The difficulty sometimes experienced in introducing the female catheter after difficult or protracted labors, consequent on the tenderness and inflammation of the external genitals, is familiar to every practitioner whose patients include any considerable number of parturient women. Any suggestion, therefore, in the direction of alleviating a condition at once painful and embarrassing, will be welcomed, and DR. G. H. KEMP communicates a method to this end to the New York Medical Record, at once simple and efficacious. He recommends that in all such cases a small compress saturated with solution of cocaine, four per cent., should be applied to the painful region, the effect being to give immediate relief, and to render the manipulations necessary to catheterism quite easy of execution. A case is cited in illustration, in which the patient, a primapara, twenty-six years of age, underwent a severe and protracted labor. Retention was complained of two days later, when examination revealed much local irritation and feverishness, and symptoms of pelvic cellulitis. The catheter then afforded relief, but twenty-four hours later retention again occurred, and by this time vagina, urethra, and vulva were all swollen and irritable to an extent that made all

attempts to introduce the catheter futile. It was now that the cocaine pad was brought into requisition, and with the most complete success.—*Med. Press*, Aug. 24, 1887.

PILOCARPINE AS A GALACTAGOGUE.—Everyone acquainted with the terrible mortality among artificially-fed infants, must admit that altogether too little attention is paid to the important subject of galactagogues.

When there is no organic vice of the mammæ to account for the insufficient secretion of milk, and no constitutional contra-indication exists, experience has taught the writer that it is always worth while to try pilocarpine. This drug, as a rule, shows its galactopœitic action in direct proportion to its physiological (diaphoretic and sialogogue) effects; but while the latter are evanescent, the former, once established, continues for weeks or months, an occasional dose being required only in certain cases to spur a flagging secretion, while the long-continued exhibition of the remedy exhausts the gland by over-stimulation. Accordingly, the woman is directed to take ⅛ grain of the muriate on retiring, covering up warm in bed, brandy being used as a vehicle to forestall any depression which might be caused by the remedy. If this dose does not cause perspiration and salivation a somewhat larger one is given on the following evening, and so on until the ordinary physiological effects are produced, by which time the efficacy or usefulness of the drug will have been demonstrated.—GEORGE MINGES, M. D., in the *Western Med. Reporter*.

NITRO-GLYCERIN IN NEPHRITIS AND URÆMIA.—Continuing his observations (*vide* the London Medical Record, December, 1885, p. 522), DR. S. A. LENTOVSKY, of the Cronstadt Marine Hospital (Meditz. Pribavl. k' Morskomü Sbornikü, November, 1887, p. 522), employed nitro-glycerin (in tabloids containing each 1-100th of a grain of the drug) and hot water baths in four cases, three of which are given with minute details. In two of the patients the daily amount of urine rapidly increased, while albuminuria and dropsy disappeared and the patient's subjective feeling and general state strikingly improved. In a third case the improvement was but fleeting, the patient dying after a short stay at the hospital. The post-mortem examination showed that he had not suffered from nephritis, but from an extensive amyloid degeneration of the kidneys and spleen. The remaining case illustrates the beneficial action of nitro-glycerin on uræmic symptoms. The patient, a girl of 15, was brought in an almost unconscious state, with general convulsions, frequent vomiting (the ejected matter smelling of urine), extensive dropsy, stertorous, frequent breathing, and small pulse. Nitro-glycerin and hot baths having been at once ordered, on the next day the girl was able to sit up in her bed, ate with appetite, and generally felt comparatively well. —*London Med. Record*, Aug. 15, 1887.

AN IMPROVED CAUSTIC PASTE.—DR. JULES FELIX, of Brussels, having found existing caustics unsatisfactory from the great pain which is caused by their application, from the difficulty of limiting their action precisely to the part desired, from their deliquescence and from various other causes, has devised a form of caustic paste which he has been using for some time past with the best results. It does not cause severe pain or set up any general reaction; the eschar is hard and well defined, so as to be easily detached. It is also a powerful antiseptic and hæmostatic. It is not deliquescent, but keeps its consistence, which is that of putty, well, and so lends itself easily to manipulation. The hands should be well wetted when applying it. They are not in any danger of being acted on. The paste is allowed to remain for from six to twenty-four hours according to the amount of eschar which it is desired to form. The formula for the paste is as follows: Mix in a mortar the following substances in powder: Starch, 37 parts; wheat flour, 112 parts; bichloride of mercury, 1 part; dry chloride of zinc, 110 parts; iodol pure, 10 parts; croton chloral, 10 parts; bromide of camphor, 10 parts; crystallized carbolic acid, 10 parts. Then add gradually a sufficient quantity of distilled water to form a homogeneous paste, without lumps, of the consistence of putty. This paste will keep an indefinite length of time.—*Lancet*, August 6, 1887.

AN ANODYNE IN USE FOR VESICAL IRRITATION.—DR. W. P. COPELAND, of Eufaula, Ala., writes as follows to the Medical Record: "In almost every community there are old men who suffer from enlarged prostates, accompanied with a chronic inflammation of the neck of the bladder, rendering them miserable sufferers, and a care and anxiety to their friends and families. Having had the professional care of several of this class of cases, and dreading the tendency they so frequently acquire from the administration of opium for the relief of pain, I resorted to various washes for injecting the bladder, resulting in my adopting a solution of benzoate of soda, ten grains to one ounce of water, with twenty to thirty drops of the green tincture of gelsemium; this is warmed and injected by the patient through a soft rubber catheter, whenever the pain is severe, and the cathether withdrawn, leaving the medicine to be voided in twenty to thirty minutes; or where he is not able to pass anything from the bladder, the catheter is reintroduced and the medicine allowed to escape. My experience with this treatment has been so satisfactory that I cannot refrain from giving it publicity to the profession."

RESORCIN IN THE TREATMENT OF NASAL CATARRH.—Resorcin has a great affinity for oxygen, and absorbs it from the tissues; reduces congestion and inflammation by contracting the vessels. In hypertrophic catarrh, it contracts turbinated tissues and this effect lasts a long time. Cocaine is only temporary in its action. Good results in infectious skin diseases because antiseptic; penetrates skin and kills germs. Cocaine interferes with secretion and proper functions of mucous membrane. Resorcin gives same results, but normal functions remain. It is slower in action and more lasting in result than cocaine. Cleanse nose with bora-

cic solution or DOBELL'S, and use two to ten per cent. in vaseline or cosmoline; use a spray every second day. For patient's own use give two or four per cent. It will cure where there are dilated turbinated tissues in from two to six weeks. Allays all redness and congestion. Turgescent state yields better than where true hypertrophy exists.—*Medical Record*, Sept. 18, 1887.

RHUS AROMATICUS IN ENURESIS.—DR. MAX, physician to the Children's Infirmary, Brussels, has recently made trial of a remedy recommended by DR. ELLIS, in his work on the Diseases of Children, for incontinence of urine. After referring to the various causes and the different specific forms of treatment of this affection, he remarks that he has never seen the remedy referred to—viz., rhus aromaticus—recommended, except in DR ELLIS'S book, and that he experienced some difficulty in obtaining it, which he ultimately, however, succeeded in doing from the New York Botanic Garden. A tincture was prepared by macerating 200 grammes of the bark in 1000 grammes of spirit at 80° C. This was prescribed in several cases in quantities of from twenty to fifty drops per diem, taken in three doses—*i. e.*, about seven to seventeen drops three times a day. The results were in the majority of cases most satisfactory. In no case was any untoward effect produced.—*The Lancet*, Sept. 3, 1887.

TREATMENT OF SCIATICA BY REFRIGERATION OF THE SOUND LIMB.—Some time ago M. DEBOVE announced that he had been able to afford marked relief in a case of obstinate sciatica by means of a spray of chloride of methyl applied along the course of the sciatic nerve in the unaffected member. At a recent meeting of the Société de Biologie (Le Concours Médical, August 6, 1887), M. RAYMOND reported that he had obtained favorable results by a similar method in three cases. He found, however, that the effect was the same even when the spray was directed to any part of the limb, and not necessarily along the course of the sciatic nerve. This would seem to prove that the relief of the pain was due to an impression made upon the spinal centres by refrigeration of the peripheral nerve-terminations, rather than to a direct influence exerted upon the trunk of the affected nerve itself, or of its fellow in the opposite limb.—*Medical Record*, Sept. 24, 1887.

AGARICIN AS USED IN BELLEVUE HOSPITAL.—Agaricin (the active principle of agaricus albus) gives uniform results in checking excessive perspiration in phthisical patients. The following formula is used at Bellevue Hospital: ℞ Agaricini (Merck), gr. x; atrop. sulph., gr. j.; acidi sulph. arom., ♏ 1200. Dissolve and filter. Dose, ♏ x, containing 1-12 gr. agaricini, 1-120 gr. atrop. sulph. and ♏ x arom. sulph. acid. To be administered in syrup of simple elixir.

It may also be advantageously given in pill form, combined with Dover's powder. Thus: ℞ Agaricini, gr. ij ; pulv. doveri, gr. xxv. M. Ft. pill No. xx. Sig. One pill five or six hours before retiring or sweat comes on. Its action is slow, hence the necessity for giving it early.—*Quarterly Bulletin; American Med. Digest*, Sept., 1887.

GREEN HELLEBORE IN DISEASES OF THE HEART.—TSCHISTOWITSCH (Nowost. Therap.; Bull. Gén. de Thérap) has used an aqueous extract and an infusion of the root of *Helleborus viridis* in eleven cases of various cardiac affections in the stage of absence of compensation. In six cases, fifteen drops of a one per-cent. solution, every two hours, diminished the frequency and force of the heart-beats, increased the flow of urine, and caused a prompt subsidence of the symptoms due to lack of compensation. In two cases, amelioration was caused by the concomitant use of hellebore and an infusion of *Adonis vernalis*, although each drug alone had failed to produce any effect. In two cases complicated with nephritis, and in a case complicated with pleurisy, no effect was produced.

SOLUTIONS FOR VESICAL DOUCHES.—ULTZMANN, of Vienna, has used the following with good results:

For an irritable bladder lukewarm water with a little tincture of opium; solution of cocaine ¼ per cent.; resorcin ½ per cent., carbolic acid ⅙ per cent. When urine decomposes in the bladder solutions of potassium permanganate 1-10 per cent., or three drops of amyl nitrite to a pint of water injected. For phosphaturia 1-10 per cent. salicylic acid is used.—*Centralblatt f. Chirurgie*, July 23, 1887.

HYDRASTIS CANADENSIS IN PILL FORM.—Les Nouveaux Rèmedes for July 24, 1887, gives the following useful prescription:

℞ Ext. hydrastis canadensis, ʒ 1½.
Ext. ergot, gr. 45.
Ferri redact., gr. 45.
Div. in pil. 120 in nunc.
Sig. From two to five pills every three or four hours.—*Medical News*, Sept. 17, 1887.

MENTHOL-LANOLINE OINTMENT.—

℞ Mentholi, grs. 15.
Ol. olivarum, ♏ 8.
Lanolini, ad. ʒ 2½.
M. f. unguentum.
Sig.—Lanoline ointment for migraine.—*Therapeutische Monatshefte*, March, 1887.

TREATMENT OF A STYE.—M. ABADIL recommends a three-per-cent. solution of boracic acid for styes. With a wetted piece of wadding some of this solution is to be dropped on the stye several times a day. It is said not only to effect a cure, but to prevent a return of the annoyance.—*Canada Medical Record.*

The Medical Age.

Vol. V. DETROIT, OCT. 25, 1887. No. 20.

Original Articles.

ON THE EXHIBITION OF THE PHOSPHATES.

BY WILLARD H. MORSE, M. D., WESTFIELD, N. J.

It is generally, therapeutically, agreed that the preferable method of exhibiting phosphorus is by the use of the phosphates. There are not wanting the most radical objections against the oleum phosphoratum and the two officinal tinctures: and there is reasonable question as to the phosphorus pill or the pill of the phosphide being of unvarying availibility. The phosphates merit the distinction, and magnify it. But while we admit the therapeutic superiority of the phosphates, and find in them the preferable method of exhibition, there arises the question as to the best way of exhibiting them. It is not by any means a new or a unique therapeutical problem. It has vexed the fathers in the time past, and to them it became as vexatious as it is to our own generation.

If we make the answer read thus, "By the combination of an acid," we have need to be self-accusative of being paradoxical, inasmuch as the leading phosphates are distinctively alkaline. Yet the fact remains that the free monohydrated phosphoric acid is the exponent sought. There is a French chemical proverb which has it, that "the phosphate of water reconciles the quarrels of its eight sisters." We gain an understanding of this saying, and at the same time minister to the congruity of the paradox, by remembering two facts, namely, the synonym for the reconciling phosphate, and the chemical nomination of the phosphates. The phosphate of water is but another name for monohydrated phosphoric acid, and it is one of the nine recognized phosphates. The remaining eight are the salts of ammonium, quinia, manganese, zinc, iron, potassium, sodium, and calcium. The ammonium salt need not concern the matter in a general sense, and the salts of manganese, quinia and zinc are not officinal or relevant to the issue. We find concern solely with the three alkaline and the ferric phosphates, and each because of the common and specified base.

The phosphate of potassium is a white, deliquescent, amorphous salt, uncrystallizable. The phosphate of soda is in large, colorless crystals, at first transparent, but becoming opaque and efflorescent on exposure to the air. The phosphate of iron is a bright slate-colored powder, insoluble in water. The phosphate of lime is a white salt, tasteless, odorless, and insoluble in water.

The phosphate of potassium—alone of the four salts unofficinal—is a neutral tribasic phosphate, having the formula $_2$KO. HO, PO_5. The sodium salt is also a tribasic phosphate, with the formula $_2$NaO, HO, $PO_5 \times _{24}$HO. The iron salt is a middle tribasic phosphate, having the formula $_2$NaO. HO, PO_5. The calcic salt has the formula $_3$CaO, PO_5.

The free monohydrated phosphoric acid is a white, transparent, fusible solid, sour, inodorous, deliquescent, and soluble in water and alcohol. Its formula is HO, PO_5.

The potassium salt has an alterative action; the sodium salt a hepatic and cathartic action; the ferric salt has all of the virtues of the ferruginous preparations in general: and the calcic salt is notably the representative calcic preparation.

The phosphates of potassium, sodium, and calcium are severally synergistic, assisting each other's acting, and promoting destructive metamorphosis. Given into an empty stomach, it is patent that they observe the distinctive characteristics of the alkalies, except that by the chemical position of the phosphorus their physiological action is amendably controlled. Phosphorus,—and as well, iron, and the monohydrated phosphoric acid,—are chemically antagonistic to the alkaline group, promoting constructive metamorphosis in the same ratio that the alkalies perform the opposite degree of action. If we administer the alkaline phosphates, we expect of them obedience to the chemical law, which prescribes a promotion of the relative acidity of the gastric juice.

This is accomplished by favoring the osmosis of those blood-constituents from which the acid of the stomach is elaborated. If with the three alkaline salts we combine the ferric salt, we procure theoretically a change of action definable as tonic. In point of reality the metallic iron, at best inert, renders the combined phosphates insoluble, dissolution by the stomach acids being hindered rather than promoted. Naturally the entrance of the combination into the blood is effectually prohibited, iron finding no opportunity for absorption as an albuminate under such revolutionary circumstances, and the phosphates declining diffusi-

bility. The three alkaline phosphates given separately or combined, will procure a certain physiological action; the ferric phosphate, given alone, is equally of physiological ability. But combine the four salts, and disappointment is the result, and the theory of nomination is rudely set aside, the natural acidity of the gastric fluid proving impotent to the work demanded, and theoretically promised.

If we pursue theory further, and follow BINZ and GORUP-BEZANEZ in adding phosphate of ammonium, we gain nothing. The behavior of ammonia in the blood is not understood, in the first place; and in the second place, the disrespectful chemical action of the phosphate of sodium is equally applicable to phosphate of ammonium. According to the logic of chemistry the ammonium salt may be conducive to solubility of the combination, but while it acts as not neutralizing the gastric juice, it is either quite slow of entering the circulation, or else it manifests lack of oxidizing power.

But there is a corrective, an agent which is promotive of the solubility of the phosphates practically, rather than theoretically. The monohydrated phosphoric acid, in its free state, renders the insoluble phosphates soluble in the gastric juice, and thereby favors their entrance into the blood. Believe it, I recognize no other way or method of securing the effects of the four salts than by the addition of the acid.

This is not new gospel. Thirty-three years ago, WIEGAND gave in the American Journal of Pharmacy (March, 1854, p 111 *et. seq.*), a formula for what he denominated "a compound syrup of phosphate of iron." This was a combination of the four salts but it seems to have carried no effect other than to inspire PROF. PROCTOR'S somewhat famous dissertation on the pharmacal value of the phosphates. The elaborate sarcasm of the well-cut pen of PROCTOR fell short of its mark at first, but, though tardily, MR. EDWARD PARRISH finally used the same publication to give the denomination and formula of the secret preparation known as "Parrish's Chemical Food." As had been expected, this preparation proved to be a compound syrup of the phosphate of iron. The formula as published then (Nov. 1857) was as follows:

Protosulphate of iron, ʒ x,
Phosphate of soda, ʒ xij;
Phosphate of lime, ʒ xij,
Glac. phosph. acid (phos. of water), ʒ xx,
Carb. of soda, ℈ ij,
Carbonate of potassa, ʒ j,
Muriatic acid,
Aqua ammonia, ää q. s.,
Powdered cochineal, ʒ ij,
Sugar, lbs., iij,
Oil of orange, ♏ x,
Water, q. s. to make fl. ozs. xx.

The compounding of this preparation was something quite fearful and wonderful. Said a writer, in commenting on the formula when published, "The objection is not that each of the ingredients may not be useful, but that they are so numerous that a morbid state of system must be extremely rare in which they can all be indicated, and every medicine is more or less noxious if given when it is not needed. The probability is that the therapeutic value of the preparation depends mainly on its ferruginous ingredient, and that, as a rule, its therapeutic effects may be equally as well, if not better obtained, from a simple syrup of phosphate of iron."

Agreeable to this latter suggestion, a formula for such a simple syrup was given by MR. WIEGAND, which involved the solution of the recently precipitated phosphate of iron in muriatic acid, adding sugar as required. The same prolific pharmacist proposed a compound syrup of the salts of iron and calcium, by dissolving in the above, a definite quantity of recently-precipitated phosphate of calcium, made by double decomposition between solutions of phosphate of sodium and chloride of calcium.

PARRISH'S phosphates gained a considerable degree of popularity, and even BARTHOLOW the conservative, especially recommends them in diseases characterized by mal nutrition. Though we are not talking of the hypophosphites, those much abused "syrups" are not more frequently prescribed for phthisis than this "chemical food" is for the anæmia of the nursing mother, physicians and druggists not only prescribing it, but its virtues being so "celebrated" that the monthly nurse has it in her grip-sack.

A preparation more elegant in appearance and superior in palatibility, is ROBINSON'S phosphoric elixir, which is exceedingly popular in the South. Each fluid ounce represents:

Sodium phosphate, grs. xij,
Potassium phosphate,
Calcium phosphate, ää grs. iv,
Iron phosphate, grs. ij,
Free monohyd. phos. acid, grs. xvj.

This signifies an equality of thirty grains of the acid, free and combined.

I have yet to find a better method of exhibiting phosphorus than this preparation affords. To be brief, it is used with decided advantage in atonic dyspepsia, chronic hepatic affections, impotence, pathological cerebral states dependent on anæmia, disorders characterized by mal nutrition, debility, nervous exhaustion, etc. The appetite is promoted, the digestion facilitated, the body-weight increased,—in a word, constructive metamorphosis is favored, and the action of a general stimulant is obtained.

NOTE ON UNUSUAL FORM OF TYPHOID FEVER.

BY J. J. MULHERON, M. D., DETROIT, MICH.

It has been my experience, as, I am informed, it has been that of other practitioners of this city, to meet, during the past few months, an unusual number of cases of fever quite different, in some respects from any heretofore encountered in this section. Had it remained fashionable to recognize such a nosology as includes typho-malarial fever, these cases would have been comparatively easy of classification, but since this name has been eliminated from the list, considerable difficulty is experienced in placing them under an appropriate heading. At one stage in their course they answer to the description of remittent fever, and, later on, the symptoms which they present would well-nigh warrant their being classed as typhoid. Inasmuch as the symptoms of the latter are the most prominent throughout their course, they are called cases of typhoid fever, although in thus classifying them the practitioner makes a mental reservation.

The attack is generally ushered in by a chill, and the fever onset is usually quite abrupt, and in violation of the old rule, that if the temperature reaches 104° within twenty-four hours after the advent of malaise, there need be no apprehension of typhoid fever. Occasionally, however, the attack is more insidious, and chilly sensations alternated with elevations of temperature continue for several days before the symptoms are deemed sufficiently severe to warrant the seeking of medical advice. When first called the unpracticed physician invariably resorts to quinine, and is very apt to predict recovery in a few days. After he has seen several of such cases he becomes very guarded in his expressions of opinion as to the course of the attack. The exacerbations of fever occur daily and are not perceptibly affected by quinine, even when pushed to the production of the characteristic head symptoms. In about a week close examination usually detects iliac tenderness, with little or no gurgling, no tympanitis and no diarrhœa. The tongue remains moist and heavily coated, with the exception of a light, brown, narrow dry streak down the centre. Headache is usually quite persistent, but not very severe. The appetite is almost suspended, although with a little urging the patient can usually be induced to eat. For the first week the failure of antiperiodic doses of quinine to abate in the least the symptoms, is about the only thing which will convince the physician, who has not become familiar with the disease, that he is not handling a case of remittent fever. At the end of this time, however, he is convinced that he is wrong in his diagnosis, and he does not hesitate to square himself with the family by perpetrating the little falsehood of declaring that "the remittent fever is running into typhoid." The possibility of such an occurrence is, of course, not questioned, and if the doctor have the confidence of the family, he changes his treatment and goes ahead on the new tack until the disease runs its course, for the possibility of cutting it short must not be entertained. Usually after about two weeks have passed, the constipation gives way to looseness, and even diarrhœa, and the alvine discharges are extremely offensive. In two cases which came under my care, the diarrhœa was interrupted by an exceedingly profuse semi-solid evacuation, after which improvement in all the symptoms set in and continued until convalescence. Ordinarily, however, the looseness continues uninterrupted throughout. The hebetude is not nearly so profound as in typical typhoid, although it is usually quite pronounced. The temperature ranges from 102° to 104°, and seldom or never exceeds the latter figure.

I will supplement this brief outline with the report of a case:

Miss. S., aged 17, was taken with a slight chill at about noon, on August 5th. This was followed by fever, and I was sent for in the evening. The temperature at 8 P. M. was 104°. Tongue was but slightly coated, and bowels constipated. Headache, frontal, was throbbing and very severe. There was some nausea and anorexia was complete. I ordered a cathartic dose of calomel (gr. vj) to be followed by a Seidlitz powder in the morning.

August 6th, 10 A. M Found patient feeling quite comfortable. Temperature 100°. The cathartic had acted to produce one copious discharge, which was of very offensive odor. Prescribed six powders of quinine, 2½ grains each, one to be given every three hours.

August 7th, 9:30 A. M. Patient complained of the characteristic head symptoms of quinine, and in addition complained of lumbar pains and aching of limbs. Temperature 101°. The bowels had not moved since previous visit. Ordered friction of limbs with chloroform liniment.

8 P. M. Temperature 103°, and tongue heavily coated with white fur. Headache had subsided, but ringing and roaring of ears continued. Prescribed hydrobromic acid, 20 drops in water, every two hours.

August 8th, 10 A. M. Patient had been slightly delirious during the night, but was now quiet. Temperature 101½°. Brown streak on tongue. No movement of bowels. Careful examination of abdomen and thorax revealed no disturbance. Skin dry, and slight hebetude was apparent. Prescribed liq ammon. acetatis, teaspoonful doses in water, every three hours.

August 9th, 9:30 A. M. Patient had had a comfortable night, and one normal evacuation of the bowels. Temperature 101½° and skin moist. The face had taken on a dusky hue, teeth were covered with sordes and hebetude was more marked. Pressure over the iliac region revealed tenderness, and slight gurgling was perceptible. The bowels had not moved. The fur in centre of tongue had disappeared to give place to dry cracks. The diagnosis of typhoid fever, for which the parents had been prepared, was now declared.

The case progressed, without the occurrence of any marked variation of temperature, until the sixteenth day, when there was a fall in the evening to 100°. This marked the commencement of slow recovery—lysis rather than crisis.

Although this case was, without doubt, one of typhoid fever, it was peculiar because of the absence of prodromata, epistaxis, diarrhœa, and rose-colored spots. With slight variations, however, the history of the case is that of many which have occurred during the past few months. The chief variation is the occurrence of diarrhœa, with peculiarly offensive dejecta. This I have found to be nicely controlled, and the odor corrected by the exhibition of salol in doses of four grains every three hours. The separate characteristic symptoms of typhoid fever have seldom been discovered, thus furnishing testimony in support of LIEBERMEISTER'S declaration that in this disease we have not a single pathognomonic sign.

THE CONTAGIOUSNESS OF PRURIGO.

BY ARTHUR WHITE, M. D., ROCKPORT, IND.

During the war of secession there appeared a cutaneous disease that was wide spread throughout the country, and was the cause of much suffering and mortification; for it visited alike the habitations of the rich and the poor; it spared neither age, sex, nor condition. It numbered its victims by the thousand, and had many synonyms. It was called army itch, Lincoln itch, Missouri mange, and seven years' itch. The term eczema, sometimes employed by physicians, is a misnomer. It seems strange that more was not written concerning this exanthem by medical men, for the cases cannot be numbered which occurred. Perhaps the carnage of battle alone arrested their attention.

The torment and discomfort are inconceivable to those who were not so afflicted. The lover of rest had sleepless nights, and those disinclined to manual labor were forced to be industrious in spite of themselves, on account of the perpetual itching and burning, for they could do nothing but scratch. The word itch seemed to give just expression to the popular idea, for many scratched until the blood trickled over the body. I first saw the disease in 1861, in the army which General Fremont had gathered in Missouri. I was assistant surgeon in an Indiana regiment, and had occasion to treat many cases. The following year I returned to my home in Indiana, and it was not long before my old acquaintance met me again. Parents would call up their entire families for inspection. The disease was a papulous eruption, which generally appeared upon the arms, shoulders and thighs, but was liable to extend to other parts of the body, though I do not recollect seeing it on the scalp. I have occasionally seen it on the faces of young children. The itching was rendered more intense by the warmth of a fire, upon going to bed, hence the suffering was greater in cold weather. In severe cases, especially in the army, the disease sometimes became quite serious: it would be accompanied by pustules and boils, and the skin would be denuded to such an extent of cuticle, by the continual scratching, that exercise would be rendered painful; this condition sometimes incapacitated men for military duty. Sometimes other eruptions would appear in conjunction, as herpes, urticaria, psoriasis, and now and then erythema. The disease was often easily cured; but many cases becoming better, afterwards relapsed and lasted for years. Thinking at the time that the acarus scabies might be the cause of the disease, I examined several cases with the aid of the microscope, but could never discover any. DR. A. BALMANNO SQUIRE follows WILLIAMS' general classification, and gives a a good description of the disease. WILLIAMS' three varieties of prurigo are prurigo senilis, prurigo formicans and prurigo mitis. But would it not be judicious to add a fourth, namely, prurigo contagiosa? Writers say that prurigo is only occasionally contagious. This disease was evidently brought to their homes by returned soldiers. In many families it could be traced to visitors. Since the war the disease has occasionally made its appearance in this locality in an epidemic form, but not so severe, nor so wide-spread; it has also revisited other localities. Persons affected with the disease are generally able to trace its origin to contact with others. It seems to me, except the intolerable itching, contagion is the most prominent characteristic of the disease; for SQUIRE says that the prolonged suffering (itching) has sometimes driven people to suicide. The contagious form of prurigo is probably a modification of other varieties, produced during the war by want of cleanliness, exposure, pediculi, and improper food. There seems to have been always a slight tendency to contagion in this disease, and the materies morbi may have gathered propagating force by the favorable conditions for its growth. It is a well-known fact that many diseases, usually considered non-contagious, may become contagious under certain circum-

stances. I have tried a number of remedies in my practice, alkaline baths, sulphur ointment, Goulard's cerate, various lotions, etc., and have occasionally given iodide of potassium internally, but found nothing equal to a solution of corrosive sublimate. My prescription is:

℞ Hydrarg. bichlorid., ʒij.
Ammoniæ muriat., ʒj.
Aquæ puræ, ℥ ij.

M. Signe:—Apply night and morning.

Put where children cannot get it.

The quantity of corrosive sublimate should be diminished in treating very young children. I never knew any bad effects from the use of the lotion. It relieves the itching, and will generally cure, if persevered with; and, furthermore, it is cleanly.

Internal remedies are seldom necessary. In domestic practice a decoction of poke-root, (phytolacca decandra) has been used as a lotion in desperate cases with good results; but it is not safe, and the suffering caused by it can scarcely be described by those who have been tempted to give this remedy a trial.

ANTIPYRINE.

BY A. J. ROSENBERRY, M. D., WAUSAN, WIS.

Having used antipyrine more or less extensively for nearly one year in my practice, I now offer a few observations on its use; I have adopted as my standard dose, for an adult, fifteen grains, repeated in one hour. Should the case require it, I again administer the same dose four or six hours after the first dose. Children, I have found, bear the remedy well. In fact all to whom I have given the drug have borne it well, with the single exception of one nervous woman with angina pectoris, in whom it produced intense pain in the præcordia, but no symptoms of collapse, no cyanosis and no symptoms of heart failure occurred.

I first used the febrifuge in puerperal fever, administered in the manner described above. It never failed to reduce the temperature from one to three and even four degrees. The treatment of this disease is immensely simplified by the addition of antipyrine to our therapeutic resources. It inspires a confident feeling that you are master of the situation. Whether the pyæmic form of puerperal fever will respond to the treatment I am unable to say, as my cases were all of the ordinary septicæmic form, in which its action was all that could be desired.

In migraine I have had only a few cases (three or four), but the drug has been a complete success in those. Two of them were extremely severe cases, of twenty year's standing. They yielded very promptly. Ordinary nervous headaches as well as the headache of typhoid fever and of a common cold are generally promptly relieved, but it is in migraine especially that antipyrine displays its magical power. The particular attack is not only relieved, but the tendency is diminished; the attacks occur at longer and longer intervals and I firmly believe a permanent cure will be effected.

In the high temperature of measles it has acted well. In typhoid fever I have used it in about twenty-five cases this summer. In ordinary cases treated by myself I have had no difficulty in keeping the temperature within safe limits. In a case seen yesterday for the first time the temperature was 105°, this morning at 9:30 it was 100.5°. Thirty grains of antipyrine were given last night at 9 and 10 o'clock; no other medicine was given.

In sciatica I have had but one opportunity to test the antipyrine and in that case the pain was greatly diminished. The same patient suffered, also, from neuralgia of the anterior crural of the opposite limb and experienced great relief from the drug. In lumbago I have made two trials. In one a twenty-grain dose gave complete relief. In the other a ten-grain dose had no effect whatever. In sciatica and neuralgia I administered the antipyrine hypodermically, which its ready solubility greatly facilitates.

In asthma I have tried only one case. It had no effect on the disease. In asthma, neuralgia, sciatica and lumbago I made trial of this drug before I knew that GERMAIN SÉE or anyone else was working on that line. I forgot to mention that in a case of epilepsy, or rather, perhaps, of a mixed hystero-epilepsy, the drug had no effect.

On pain in general, antipyrine seems to act much like morphine, without its disagreeable consequences. While I would not think of substituting antipyrine for morphine in a case of intestinal colic, or in any case where the pain was very severe, I think that in the headache and general malaise of a severe cold, or of typhoid fever, antipyrine is much to be preferred to morphine. The writer had occasion a few weeks since to test the article personally and must say that the relief from the headache, aching of limbs, etc., accompanied by a temperature of 101°, was immediate and complete. A gentle perspiration was produced and in a short half hour all disagreeable symptoms were gone; a single twenty-grain dose did the business. I believe antipyrine to be the most important therapeutic discovery of the last twenty years.

LATENT RHEUMATISM.*

BY CHARLES MOORE JESSOP, M. R. C. P.†

An out patient note-book may be made valu-

* From the Bristol Medico-Chirurgical Journal.
† Physician to the St. Pancras and Northern Dispensary.

able when there is time and efficient assistance to record cases; but single-handed, and with a large number of patients, this is not always possible. Nevertheless, I venture to hope that the following imperfect notes, of two or three cases out of many, may be useful in drawing attention to one of the minor ailments of life, under cover of which there may be prolonged malaise, or formidable disease developed.

From text books there is little to be learned on the subject of latent subacute rheumatism. The fullest description of the subject is found in QUAIN'S Dictionary, and there only alluded to with reference to the growing pains of children.

The pains which young people, especially girls, complain of in the left breast are generally treated with scant consideration, being referred to indigestion, hysteria, or rheumatism, for which no particular treatment or examination is required, because there is no particular appearance or sign of active disease. It has often occurred to me that there was something of more serious import underlying this condition, and that the seat of discomfort was not duly examined from motives of delicacy; and, also, because in young girls or women both glands at a certain age take on a hyperæsthetic condition. In the cases to be detailed the pain was confined to the left breast, and had nothing to do with the gland, for when the gland was moved bodily there was no pain: pain was only elicited when digital pressure was employed between the ribs beneath the gland, chiefly below the apex-beat and to the left. Besides this pain there were also "fleeting pains" in one or more of the joints, so slight as to be forgotten until enquired for—even then not always remembered distinctly. The urine had not always been noticed, and might or might not be high colored. As a rule, no feverish condition was complained of, but generally constipation; and bruit de diable was always present. Occasionally palpitation and shortness of breath. Menstruation not always normal.

At Christmas, 1883, E. S., æt. 20, came to my house at Preston. She was naturally bright and active, and three months previously appeared to be in good health. But on this occasion she was dull and listless; her movements slow and languid, walking with care, soon out of breath, and exceedingly pale. Made no complaint of pain anywhere, but sat still and did nothing The heart's sounds were muffled; there was a soft systolic bruit at the apex, with tenderness on pressure over the whole of the cardiac region. No abnormal dulness, and no friction sound. Slight dulness over the right apex, and feeble respiratory murmur. No cough. Bruit de diable loud. An œdematous condition of both ankles and legs, chiefly the left. There were tenderness and hardness in the course of the left femoral vein. Pain on pressure over the right hip-joint, with some fulness; afterwards in the left hip joint. The right apex, cardiac region and hip-joints were painted with iodine liniment every second or third day according to the extent of tenderness. Internally dilute nitro-muriatic acid in twenty-drop doses, with tincture of iron in fifteen-drop doses, were prescribed three times daily. This was varied from time to time, so that the stomach should not be wearied by one form of drug. But the external application was persisted in so long as there was any tenderness or swelling. The femoral vein was left to take care of itself; as her health improved, the tenderness and hardness gradually disappeared. At the end of two months she was able to run up and down stairs without reproducing the murmur, when she was transferred to Bournemouth, where she completed her recovery.

This young lady's case perplexed me considerably at first, for the idea of latent subacute rheumatism was not present to my mind. The above detail was not unfolded all at once: the heart and vessels first engaged attention; later on, the hip-joints; then, gradually, the pathological relation between the heart and hip-joints was established.

Rheumatism is characterized by inflammation of the fibrous structures, and when it is latent "the joints are so slightly affected that its signs and symptoms may be entirely overlooked." Pain and tenderness in children are often disregarded, or called "growing pains," or ascribed to "a cold." The subjects of these "fleeting pains" and cardiac tenderness are not confined to children, but extend to others of older growth. In the absence of the well-known symptoms of acute rheumatism, there is a latent form which, if recognized and treated, leads to ease, comfort and recovery; if neglected, may lead to long continued discomfort, for which the doctor obtains no credit.

Women are more subject to rheumatic diseases of the heart than man; this may be the result of imperfect nutrition, induced by the action of stays, which by compressing the lower ribs prevent the gentle rise and fall of abdominal viscera, especially expansion of the liver and spleen during digestion, essential to a free performance of their duties, and prohibit the heart's descent of one inch and a half eighteen times in a minute, to say nothing of the structural injury inflicted on the liver and stomach. This impediment of the heart's free movement has, it appears to me, much to do with the pain situated near the heart's apex in some cases. It is discoverable only by digital pressure or on application of an intercostal stethoscope. Probably this pain arises from a hyperæmic condition of that portion of the pericardium attached to the central tendon of the diaphragm, through abnormal approxima-

tion of the visceral and parietal layers due to imperfect descent of the diaphragm in respiration. This pain and tenderness, then, might more properly be referred to pericarditis, which in many cases is so mild a disorder that it is attended with few or no symptoms of importance. "In the mildest form pericarditis often escapes detection, or is recognized only by the accidental discovery of pericardial friction; in most such cases, however, there is some time or other slight præcordial pain or uneasiness, together with extension of cardiac dulness and febrile disturbance. Most cases of what are termed 'latent' and 'dry' pericarditis belong to this group." The symptoms of rheumatic pericarditis are "dyspnœa, palpitation, and a sense of oppression increased by pressure in the intercostal spaces." "Muscular rheumatism also attacks the heart, causing violent palpitation."

The following case of a dispensary patient, following her daily occupation in an upholsterer's shop, combines an interesting series of events which illustrates most of the foregoing extracts from well-known text-books:

E. R., æt. 19, 5th Feb., 1887, a fresh-complexioned, stout, healthy-looking girl, pale, complained of pain over the left breast, a fulness after meals with some eructation; of pain and violent palpitation at night. Has had "fleeting pains" in several joints, at present in her elbows and forehead. There is some heaving in the cardiac region, with tumultuous action of the heart, shortness of breath on exertion, and pain on pressure in the intercostal spaces, mostly in the 5th and 6th interspaces, extending to the outer side of the breast. Slight bruit de diable, clean tongue, slight constipation. Liniment of iodine was applied once a week, and a mixture of nitro-muriatic acid diluted, with digitalis and quassia. 19th Feb. she was much better; able to scrub out a room and walk up stairs without distress. Heart's action quieter, and pain limited to one small spot. Iron tincture was added to the mixture. 26th Feb., had lost all pain in her joints, but complained of tightness over the cardiac region. The heart is still tumultuous. On the 5th March the digitalis was omitted from the mixture. On the 8th March the tightness had increased, but the heart's action was quieter, and there was considerable swelling of the 6th and 7th intercostal cartilages at their junction with the ensiform cartilage—a distinct oval prominence about an inch and a half long and not quite half an inch broad. It was not tender. It was painted with iodine. On the 12th March this swelling had somewhat subsided, but she now complained of oppressive tightness over the manubrium sterni. There was no pitting, no redness, but the skin was not freely movable. On the 19th March the cartilaginous swelling had further decreased, but the tightness over the manubrium had increased. She complained of pain and oppression mostly between 3 and 5 p.m., or for longer; and it was especially worse if the workroom became hot. There was no tenderness, but a diffused swelling and immobility of the skin. Mixture was continued. On the 26th March, the heart's action was normal; the tight area had decreased, the cartilaginous swelling was going down. The painting with iodine was steadily continued. 2nd April. Had felt pretty well during the past week: only complained of the pain and sensation of tightness twice. 9th April. Tumefaction over the sternum disappearing, and felt the tight feeling only once. The lower swelling almost imperceptible. On the 16th April she was fairly well, and ceased to attend. On the 20th May she wrote to say she was not able to attend, but was a little better: so it is presumed she had not entirely recovered, or probably suffered from slight relapse.

MRS. R., æt. 30, pale and thin, on the 14th May complained of pain in her joints. She had some feverish symptoms and thirst, with pain on pressure beneath the left breast. No palpitation. The same mixture and local application were employed. On the 17th May she had improved, but had cartilaginous swelling of the 6th, 7th and 8th ribs at their junction with the ensiform cartilage, also a pain in the right knee and toes. On the 21st May she was improving. On the 28th she did not appear; so it may be presumed she is progressing favorably.

She made a good recovery.

E. T., æt. 27, 1st March, 1887, a cook, stout and of strumous habit, pale, had pain in joints and pain in the cardiac region. On pressure in the intercostal spaces, there was considerable tenderness extending from the left border of the sternum beyond the nipple-line. She had scanty and irregular periods of menstruation, constipation, and bruit de diable. She had inhabited a room over the water-tank of the house, and many former occupiers had been unwell. Last year she was under treatment for anæmia, and had recovered, living in the same situation, but now occupying a better bedroom. A mixture of iron, acids, Epsom salts and quassia, with cod oil, were prescribed, and weekly paintings with iodine. On the 5th April she was considerably improved in all respects. The cardiac pain had not entirely disappeared. The local application was used once a fortnight. On the 24th May she had lost all cardiac tenderness, and felt free from pain and discomfort: to continue iron, arsenic, and chiretta mixture, with cod oil, for another fortnight.

A. M., æt. 16, a kitchen-maid, stout, fresh-complexioned girl. Gums and fauces pale, loud bruit de diable. "Fleeting pains" in her joints, cardiac pain over area of pulmonary artery; this gradually disappeared, and was

transferred to the 5th and 6th interspaces. Suffered from constipation. No appetite; menstrual flow pale. Tenderness over 1st and 2d dorsal vertebræ Ordered to take acid, iron, and quassia mixture after meals, with aloes and iron pill at bedtime. On the 10th May was much improved: to continue mixture, and take a morning aperient of scruple doses of compound jalap powder and sulphur. Locally, the iodine liniment as before. On the 24th May she had nearly lost the cardiac tenderness and that over the dorsal vertebræ. Going for a month into the country.

She returned from the country with incipient varicose vein in the left leg, a return of pain in the spine and cardiac region. Complained of "faiting fits" in her household work. Being a good-looking girl, though stout, she aspired to slimness of waist: the "fits" ceased when the stays were worn loose; she speedily recovered.

A stout, active lady, æt. 54, fell downstairs last September. Six weeks later suffered from inability to take carriage exercise, owing to extreme tenderness of the whole spinal column. She so far recovered this, that in March she left London for the country. On several occasions she had complained of a rheumatic affection of the joints, "fleeting pains," and latterly of puffiness of the face and swelling of the left jaw. Just before leaving, the heart's sounds were found to be muffled at the apex. She looked pale, and generally out of health, though she had been taking various tonics. Her brother, a medical man, was communicated with; he found "the percussion note normal all over the cardiac area; the apex-beat in the right position I found, as you say, the sounds rather muffled and distinct at the base; but at the apex they were very clear. Both sounds otherwise were normal; and there is certainly no evidence of valvular mischief. The pulse too is regular and of good volume, 76. She complains very much of pain over the occipito parietal suture, which, I should imagine, is due to the great nervous shock she must have received in that fall; and I should consider the muffled heart sound is due to the same cause. Her tongue is very flabby, and indicative of want of tone." Prescribed acid, nux vomica, digitalis, and quassia She improved greatly, and returned to London at the end of three weeks. The heart's sounds were found to be stronger at the apex, and the general aspect improved. She continued the mixture she had been taking for a week longer. On digital pressure below the apex beat, and over the left and outer side of the cardiac region, pain was elicited: to this, liniment of iodine was applied once a week. Tenderness has slowly decreased; only a small tender spot remains. Within ten days of her return, puffiness of the face and swelling of the jaws reappeared for a couple of days. At present, the heart's sounds are full-toned and regular. Dyspnœa on prolonged exertion.

Had the cardiac tenderness been recognized in this case there would probably have been no relapse, and a lingering malaise avoided. Her improved health is attributable solely to the local treatment, which is not yet omitted.

The local treatment was continued fortnightly for two months longer. She is now well and can walk uphill without discomfort.

I have ventured to record these few cases, recently under treatment, because the persons are fresh in the memory, for the purpose of drawing attention to careful digital exploration of the intercostal spaces in the cardiac neighborhood, and to show the value of local treatment in cases which appear to be trifling. There was no hysterical tendency in any of the patients, and to guard against sympathetic influence, comparison was made with the opposite side. All the cases were what would be termed "anæmic," and would be treated by restoratives; but an endeavor has been made to show that these agents will not of themselves, unless supplemented, suffice to produce a restoration to health in rheumatic anæmia or latent subacute rheumatism, a condition which has to be sought out.

Before concluding this communication, I may perhaps be permitted to mention the value of free painting with liniment of iodine in acute rheumatic fever. A schoolboy, of 14 years, had a severe attack, with the usual high temperature, sweats, and so forth. The first day he was seen, the heart's sounds were found *slightly* muffled The whole of the cardiac area was painted; the following day all muffling had disappeared. Every joint in his body in succession was attacked; each was painted with iodine on the occurrence of pain or redness. The painting was repeated in many instances, and the cardiac areas required repeated attention. The other treatment was with bark and acids, and finally iron. The case was extremely severe, but he made a good recovery, and without the slightest damage to the heart. It is unnecessary to point out the value of this counter-irritation on the local and general circulation, nor yet on the reflex action through the brain and cord centres, by which a change is induced in the nutrition of the tissues.

The Medical Times states that Dr. Clara Mitchell, of Philadelphia, made an especial clinical demonstration of the discoloration of the vulva and mucous membrane within the vagina during pregnancy. The subject had been pregnant for three months and the parts presented a very decided purplish, venous hue. Our Philadelphia sisters are, evidently, coming quite to the front in matters genital.

Correspondence.

THE GLEDITSCHINE (STENOCARPINE) SENSATION EXPLODED.

The readers of the AGE are, doubtless, already familiar with the claims that have been made as to the remarkable anæsthetic and mydriatic properties of an alkaloid said to have been derived from *Gleditschia triacanthos*, and which was at first called stenocarpine (see papers of DRS. J. H. CLAIBORNE, H. KNAPP and EDWARD JACKSON, *N. Y. Medical Record*, July 30th, Aug. 13th, Oct. 1st, and *Philadelphia Medical News*, Sept. 3d).

While experience with other so-called rivals of cocaine had rendered us rather skeptical as to the validity of the claims made for gleditschine, the glowing reports that had appeared led us to investigate at our laboratory this much vaunted anæsthetic. We accordingly obtained a supply of gleditschia triacanthos, from which we were unable to extract but an infinitesimally small percentage of alkaloid, which, on testing, gave no evidence of possessing anæsthetic or mydriatic properties.

The experiments reported in the papers above quoted were all made, we learned, with a *solution* of gleditschine, or stenocarpine. On request to DR. SEWARD, the discoverer of the alkaloid, for a sample of this solution, he referred to Messrs. Lehn & Fink, of New York, from whom alone he states a solution of this alkaloid could be obtained.

An analysis of this solution disclosed 6 per cent. cocaine and a sulphate of a salt, which, it is probable, further investigation will prove to be atropine.

We have pleasure in submitting in this connection the report of F. A. THOMPSON, Ph. C., of our analytical department, a perusal of which will make clear the facts above presented, and show physicians who have already published reports on gleditschine that they have been made the victims of a clever hoax. The unscrupulousness of those interested in this fraudulent attempt to impose upon the medical profession can not, we think, be too strongly condemned or the facts too widely published.

REPORT OF F. A. THOMPSON, PH. C.

"Having had placed in my hands a sample of the solution of the new local anæsthetic, gleditschine, I made a chemical examination of this newly-reported discovery, the so-called rival of cocaine, made by DR SEWARD, of Bergen Point, N. J. (I take the liberty here of asking who is DR. SEWARD?) I am able to draw the following conclusions in the limited time allowed: The contents of the bottle, measuring nearly a fluid ounce (26.5 C. c.) has a peculiar sweetish odor, and an amber-like color; sp. gr. 1 016 at 59° F., and from its syrupy-like appearance, was suspected of containing more than 2 per cent. of the salt of any alkaloid.

This is an exact copy of the label on bottle submitted:

GLEDITSCHIN
C_{20} H_{21} NO_3
SO-CALLED
STENOCARPIN.
A new local Anæsthetic.
The salt not being permanent, this 2% solution is recommended.

The name Stenocarpin was given this alkaloid by Dr. Seward, its discoverer, because of the close resmblance which the leaves from which he prepared it bear to those of the Acacia Stenocarpo; they have since been identified as belonging to the Gleditschea Triacantha.
Recent investigations have proven that in many cases it is preferable to Cocain, and in ophthalmic diseases superior to Atropin.
LEHN & FINK, - - NEW YORK.

Five c. c. allowed to evaporate slowly over sulphuric acid in a closed chamber, until of a constant weight, gave a residue weighing 400 m. g., indicating the presence of 8 per cent. of soluble constituents, and in solid form of a dark amber-like color, amorphous, and almost free from odor. The alkaloid of 5 C. c. of the solution precipitated by the addition of a solution of caustic alkali, and shaken out with ether, gave upon evaporation of the several ethereal washings, and dried to a constant weight, an almost white, mostly crystalline residue, weighing 306 m. g., proving the presence of 6.12 per cent. of anhydrous alkaloid, equal to about 6.85 per cent. calculated as muriate. This residue (alkaloid) was again dissolved in ether, and allowed to evaporate spontaneously, when most of it crystallized into distinct acicular crystals, arranged in stellate form, which is a characteristic form in which its rival *cocaine* (!) alkaloid crystallizes. By a fractional crystallization from ether, about 92 per cent. of the total alkaloid was separated as crystalline, the residue remaining in a soft amorphous condition. The separated alkaloids were converted into a muriate from which I have made 7-per cent. solutions, and hope to be able to make some physiological experiments to determine if possible the presence of more than one alkaloid, the existence of which in the solution I have reasons for suspecting. A one-per cent. solution of the crystalline alkaloid, as well as the original solution, was submitted to DR. GEISEL'S test for cocaine, of potassium permanganate, but I was unable to produce a crystalline permanganate salt of cocaine, the failure being possibly due to its impurity, though this test often fails with the pure salt. I was, however, able to perceive the distinct odor of bitter-almonds when slightly warmed,—another peculiarity of cocaine (hygrin), which I am unable to find ascribed to any other alkaloid. A few drops of potassium permanganate, gave the odor of bitter almond; also reducing a large amount of a solution 1 : 1,000.

A solution of 1:400 of the crystallized portion, in the form of muriate, produced with *platinum chloride* a yellow precipitate, of feathery-like crystals* in stellate form, resembling snow-flakes. *Chloride of gold* produced a distinct precipitate in solution containing one in 3,000, forming small *fern-frond* shaped crystals arranged somewhat in stellate groups. MAYER'S reagent, a solution of iodine in potassium iodide, picric acid, and other alkaloidal reagents produced precipitates of color, etc., peculiar to those ascribed to *cocaine.*

Qualitative tests were also made for sulphate and chloride with positive results, indicating the presence of quite a large percentage of chloride, and only a trace or more of sulphate, which results, as well as the physiological tests, prove almost conclusively that more than one alkaloid is present,—probably cocaine hydrochlorate and atropine sulphate or some other mydriatic or even a myotic alkaloid, used possibly to counteract the action of the mydriatic.

Previous to any chemical examination, a few preliminary physiological tests were made upon myself and other self-sacrificing subjects. A drop was placed in the eye and after a few minutes the conjunctiva was thought to be less sensitive to the touch. After 15 minutes, the pupil began to dilate, and at the end of thirty minutes, was so completely dilated as to cause considerable pain. This lasted for more than two days, and from its long-continued action left the eye quite sensitive to any strain. About 10 minims were injected into the forearm without any perceptible effect, and when applied to the tongue produced a benumbing sensation similar in every respect to cocaine. One drop of the solution was put in the eye of a cat, and within a few minutes the conjunctiva was almost completely blanched and the pupil dilated, which lasted less than 24 hours.

My conclusions subject to further analysis which I hope may identify the exact constituents, are : 1. That the solution, claimed to be a two per-cent of gleditschine, is not what it is represented, and that those introducing it as such are guilty of fraud.

2. That the solution likely contains some coloring agent, differing from that obtained from the drug in which the alkaloid is isolated, or that the color may be due to the presence of an alkaloid, or the substance supposed to be in combination with the cocaine.

3. That the peculiar action of the extracted alkaloid to chemical tests, appearance, taste, and odor, suggest it to be none other than cocaine.

4. That the presence of chloride and sulphate indicates positively that a sulphate of one alkaloid and a muriate of another are present; and the presence of cocaine being established, which is without doubt in the form of muriate, the sulphate can be accounted for only by assuming that it is in combination with *atropine*, or some other mydriatic alkaloid, such as *duboisine.*

5. The solution contains 6.85 per cent. of alkaloid, calculated as cocaine muriate instead of 2 per cent. of Gleditschine (!) as stated on label.

6. That the dilatation of the pupil of the eye was thought to be more lasting than from cocaine, and less so than from atropine, indicating the possible presence of some myotic, modifying the action of the mydriatic. Experiencing no dryness of the throat or any hallucinations from the hypodermic injection of the solution. it is possible no *mydriatic* except cocaine is present.

7. That the statement made, that the salt was not permanent, and finding the salt of the alkaloid in this solution quite so, leads one to suppose that this *is not the reason for making such an assertion.*

8. That having had placed at my disposal through the firm of Parke, Davis & Co., several pounds of the leaves from which I am unable to produce as yet but a trace of alkaloid giving precipitates with the usual alkaloidal reagents, and which applied to the tongue, produces no sensation whatever, and the existence of a volatile constituent very probable, and a large amount of resinous like substance having strong astringent properties being present, I question the existence of an anæsthetic or mydriatic alkaloid in Gleditschia triacanthos.

No new discovery to my knowledge has received such wide circulation in the medical press in so limited a time, as "*Gleditschine,*" and for this reason, it will be unnecessary to give a description of the tree, *Gleditschia triacanthos, L.*, from which the leaves are obtained, and the part from which the new local anæsthetic is claimed to have been obtained. Viewing this enterprising scheme of making a 2 per-cent. solution of *Gleditschine* as a money-making one, no doubt the perpetrators of the fraud have realized their aim, the solution costing the physician $6.00 an ounce, and calculating the cost from the cocaine muriate found in it to be less than 50 cents, a *handsome* margin is left to the originators.

Without further commenting on this *great discovery*, I will leave the medical profession to form their own conclusions, advising them, however, to guard against a second *hopeine* swindle."

Respectfully Yours,

PARKE, DAVIS & CO.

DETROIT, MICH., Oct. 21, 1887.

*Amer. Jour. Pharm., Oct., 1885, Lyons.

THE CONTRACT SYSTEM.

The editorial in the last number of the AGE, on the Contract System, is full of suggestions for careful thought. Certainly the condition of medical practice is getting to be such that some plan for securing the medical laborer his hire, is extremely desirable, if not, indeed, imperative.

The difficulty experienced by physicians in making a comfortable livelihood out of their profession, is commonly attributed to the overcrowded state of the profession, the proportion of physicians to the population of this country being 1:500, while in the commercial centres it is worse. Many physicians are successful after years of practice, and boast a clientele of over several thousands, to this extent, therefore, contracting the field left for the beginner to cultivate. While, unquestionably, the profession is overcrowded, both down stairs and at the top, it is not herein that the trouble chiefly lies. Practice is still adjusted to a condition of affairs which existed centuries ago, and which carried with it no hardships until, say about a quarter of a century ago, when preventive medicine, "the flower of modern civilization," took its start. This impetus to preventive medicine was given, and is still kept in motion by the medical profession, who are paid for curing disease and not for preventing it. That it is the duty of the physician to dispense the ounce of prevention in preference to the pound of cure, no one will for a moment deny. But that he should render this service to the public not only without remuneration, but also to his own direct pecuniary loss, is too much to demand of him. His services as a preventer of disease is more valuable to the community than as a curer thereof, and the public has no legal or moral right to receive such service without paying for it. How shall the manner of paying him be arranged? Very clearly, there is no method more practicable than under the contract system. Let a physician be paid so much per annum by each person or family, and whether sick or well he or it is at liberty to demand his services. Under the present system the public has no right to demand the physician's attention when well, and the physician who has a regard for the material prosperity of the profession has no right to give it.

PRO BONO MEDICO.

NORMAL LIQUID ERGOT.

I received a package of liquor ergotæ purificatus on September 19th. On September 21st, at 12 o'clock, I was called to see Mrs. K. H. M., who sent for me in haste, stating that she had miscarried at three and a half months on last Saturday, but the placenta did not come away. I had a bottle of Squibb's ergot in my saddle pocket, but I carried the liq. ergot purif., intending to try it if ergot was indicated. I found the woman very ill. She had lost a great deal of blood, and was almost bloodless. On examination I found the uterus open and the decomposing placenta adherent, and hemorrhage. I found great difficulty in peeling off the placenta. While performing the operation I had the nurse to give her spirits of ammonia and liq. erg. purif., 1 drachm each, added to one-half fluid ounce whisky julep. Strong uterine contraction followed in a few minutes and the entire secundines were expelled and hemorrhage ceased, when she said, "There now, it is all over; I am so much better." I left her out of danger and getting well.

Yesterday I tried the "ergot liq. purif." (normal liq. ergot, P., D. & Co.) in a case of obstetrics where there was very marked inertia of uterus. I gave 60 drops every three-quarters of an hour for four hours. Result, strong contractions, and a fine girl at 1 P. M.; weight, 6 lbs; mother and child doing well. It was a typical case.

Heretofore I have used Squibb's ergot, fluid extract, and when I had to repeat the dose, which was often, it would nauseate my patient, but not so with the normal liquid. It agrees with the stomach. Happy, indeed, am I to find a reliable medicine under such circumstances, and one that the lady does not object to. I do not use ergot often; I am a great hand to wait on "Mother Nature" in most cases, but when it becomes necessary to assist nature, I want a remedy which will agree with nature and help her, strengthen her for the ordeal—a *vis a tergo*. I find that the normal liquid is the remedy in such cases. It says to the lazy, inert uterus: "I will not let thee go, until a blessing (child) thou bestow."

I would like also to state that while the normal liquid ergot is the best for the parturient woman, it is also best for her child. My experience, both in my own practice and in consultations, is that some forms of ergot are as injurious to the child as to the mother. This may be doubted by some, but long experience establishes me in the belief of what I humbly affirm.

C. W. WATTS, M. D.

AUXVASSE, MO.

GLEDITSCHINE—STENOCARPINE.

The fact, seemingly well proven by the experience of DRS. SEWARD, CLAIBORNE, KNAPP, JACKSON, MITCHELL and others, that the newly-discovered alkaloid gleditschine-stenocarpine, is largely like cocaine in its power as a a local anæsthetic, has prompted me to determine whether it has a value akin to that drug as a stimulant in the treatment of opium

habitues, and I am now experimenting in this direction, using a two-per-cent. solution, exclusively by subcutaneous injection.

That cocaine, hypodermically, is a valued aid in treating the opium neurosis, is beyond question—in my opinion—but it is not a specific, and should never be used, for this purpose, by the patient himself, be he physician or layman.

Should gleditschine have a similar value, it may be found free from the ensnaring danger of cocaine, though—assuming its stimulant power—this freedom from risk will not be likely, and we shall note, probably in the not far future, baneful effects from its abuse, and gleditschine inebriety be added to the list of toxic neutroses.

It has been stated by DR. SEWARD that "he has observed antidotal effects to gleditschine from morphine," and MITCHELL, W. H., asserts "it is a direct antagonist of morphine and opium, ten drops of the two per-cent. solution neutralizing one grain of morphine, or six of opium." Experiments on rabbits, now being made by myself, will, it is to be hoped, sustain these claims.

I shall be pleased to receive and report the experience which any reader of your journal may have on this subject.

J. B. MATTISON, M. D.

BROOKLYN, N. Y., 314 State Street.

"AN OPINION WANTED."

I regret that you did not see that the letter published in the last No. of the AGE, under the above caption, was addressed to J. J. MULHERON, the individual, and not to the readers of the AGE. It was not designed for publication.

The main question in that inquiry "Does traumatism cause eclamptic spasms?" seems in the light of modern opinion to be puerile. Eclampsia is a specific disease and depends upon a specific cause. Might as well talk about a broken leg producing small-pox, a cut on the foot causing measles, or a "stone bruise" resulting in whooping-cough, as about a small bruise on cervix uteri being responsible for fatal eclampsia. This, at least, is my own opinion.

The question is of local importance because a man is being tried in this county for murder upon that hypothesis, and I wished to show the authorities that my opinion was that of the leading men of the profession. So I addressed letters containing the inquiry to a number of physicians of prominence, yourself among the rest.

The many responses I have received have all been in harmony with my own opinion, with one exception (and that was a qualified one).

By giving the above an insertion in your journal, you will oblige.

C. B. WILEY, M. D.

BRIGHTON, (not Howell) MICH.

EUPHORBIA PILULIFERA IN ASTHMA.

During a visit to my old home, in Virginia, I was requested to see what was regarded as a remarkable case in the community, that of a young woman who had been practically bed-ridden for two years, unable to do any manual work on account of the asthma with which she was afflicted. Her hair had during this time changed from a deep black to a snowy whiteness. She had been under the constant care of able local physicians, who had exhausted their ingenuity in prescribing for her relief. Having employed euphorbia pilulifera with satisfaction, to both my patients and myself in my own practice, I placed her on it, with the result of so much success that in ten days she was up and about the house attending to her domestic duties, and, incredible as it may appear, two weeks after she commenced its use she rode on horseback to the town of Keysville, ten miles distant.

Asthma is a peculiar ailment and all cases will not succumb to the same remedy, but no case should be pronounced incurable until it has been subjected to a course of euphorbia pilulifera.

H. E. HOOTTON, M. D.

KIMPNER, TEXAS.

DR. F. H. GERRISH, Secretary of the State Board of Health of Maine, has been "putting up a job" on the medical colleges of the country. He employed a little girl, eight years of age, whose handwriting betrayed her immaturity, to write, over a fictitious name, asking whether she could be admitted to their classes. She confessed her ignorance of most of the subjects required in the preliminary examinations, according to the "announcements." Of the number written to, one-half gave her no encouragement, and the others led her to understand that she need have no fear of the examination. DR. GERRISH gives an interesting resumé of the replies received, and reaches the following conclusions: "It appears that about one quarter of our medical colleges make no profession of requiring any real preliminary education in their pupils; a few hint vaguely at the desirability of some knowledge, and about two-thirds announce an examination or its equivalent, as shown by a certificate. Of these the last half adhere to their pledges, and the other half evidently do not mean what they say. The actual standard is extremely low. A very few schools require a preliminary education which is somewhere near an equivalent for medical study. A considerable number exact a knowledge of the ordinary grammar school studies with a mere trifle of natural philosophy; the most will admit any male human being who can write an intelligible letter of inquiry and pay his tuition fees."

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., OCT. 25, 1887.

Editorial.

RECENT ADVANCES IN THE TREATMENT OF CONSUMPTION.

No disease on the list is so thoroughly the *bete noir* of medicine as is consumption. If exhaustive study, careful experiment, close observation and intense desire have been especially devoted to one ailment, that ailment is consumption, and yet it stalks through the land quite as deadly in its visitations, to all appearances, as it ever has been in its history. The prospect of discovering some agent, or devising some means of staying its ravages is not encouraging. In spite of all that has been done, the physician who is consulted by a consumptive goes about his duty of prescribing, medicinally and hygienically, in a sort of perfunctionary manner, having little hope that his most devoted efforts can do aught towards staying the course of the disease. No practitioner would, however, feel himself justified in pursuing the purely expectant plan of treatment, and it becomes him to be familiar with the most recent "advances" in the therapeutics of the affection. These are admirably set forth in a recent article by DR. S. S. COHEN, of Philadelphia, in the Medical News. In the article the author declares that the objective therapeutic point may be summed up in one word—Nutrition. In his efforts to accomplish this he gives prominence to DEBOVE'S plan of forced feeding, or the introduction into the stomach of a flexible tube connected with a funnel through which is passed the aliment to be administered. The taste of the food thus being a matter of no importance, feeding can be conducted to the limits of the digestive capacity of the stomach. DEBOVE'S meat powder has usually been given, but milk, eggs, soups and farinaceous powders may be employed instead or in addition. A mixture which has found favor with the author consists of a quart of milk, two tablespoonfuls of meat powder, three eggs, fifteen grains of scale pepsin and thirty drops of dilute hydrochloric acid. This mixture may be introduced twice a day. Fried foods of all kinds, pastry and other such indigestible matter must be discarded.

The problem of nourishing the consumptive divides itself naturally into three parts: First, the preparation of the digestive tract, to elaborate and to absorb the chylous fluids—primary assimilation. Second, the promotion of the complex process of the breaking down and displacement of imperfect tissues and effete products, and replacement by new and vigorous tissues, with evolution of forces required in the economy; i. e., metabolism—secondary assimilation; and third, the promotion of the excretion of waste products.

The first desideratum is endeavored to be be secured by methods which cleanse, disinfect, and stimulate the digestive canal; varied in detail according to circumstances. When we have reason to suppose, for example, that a sluggish gastric catarrh interferes with digestion, washing out the stomach may be practiced with good effect. The procedure is quite simple. A stomach-tube of similar material to French catheter tubing, about 28 inches long, and from ¼ inch to 7-16 of an inch in diameter, is attached by a short section of glass tubing, to a soft rubber tube about a yard long, in the extremity of which is inserted a hard rubber funnel of about six-ounce capacity. The stomach tube having been dipped into warm water or warm milk, is introduced into the œsophagus and propelled by successive pushes, or swallowed by the patient; and the funnel being sufficiently elevated, from a pint to a quart or more of warm water (100° F.), in which is dissolved a drachm or two of borax, table salt, or baking soda, is slowly poured into the funnel. As the last of the fluid is passed out of the funnel, the latter is rapidly inverted over a receptacle on the floor, and the contents of the stomach are thus siphoned out. The manœuvre is repeated until the returned water is clear. This process, called lavage, which, as already stated, suggested gavage, and is practiced in much the same manner, leaves the gastric mucous membrane in excellent condition for digestion and absorption. It may be immediately followed by gavage, as recommended by DUJARDIN-BEAUMETZ. The drinking of half a pint to a pint of hot water, half an hour to an hour before meal time, will sometimes accomplish much the same purpose, and is, of course, less troublesome.

When a condition of septic fermentation is believed to interfere with digestion, a suitable antiseptic agent, such as carbon-disulphide water or solution of hydrogen dioxide, may be introduced into the lavage solution, and a portion allowed to remain a few minutes in the stomach; or creasote, carbolic acid, iodoform, the solutions mentioned, or other agents may be administered in the ordinary way. When the intestinal canal is believed to be the seat of the trouble, we may attempt to wash it, indirectly, by lavage, or by potations of hot

water, or to medicate it with creasote, bismuth, sulpho-carbolates, mercurials, iodoform, sulphides, naphthalin, or other appropriate drugs. DR. COHEN has reason to believe from the effect produced upon some cases of phthisis attended with diarrhœa, that the injection per rectum, of hydrogen sulphide, directly or indirectly arrests septic fermentations in the small intestine.

To aid digestion, stimulate digestive secretion, and promote absorption, in addition to the measures already referred to, preparations of malt, HOFFMANN'S anodyne, bitter tonics, nux vomica, arsenic, preferably FOWLER'S solution, iron, nitro-hydrochloric, nitric, and phosphoric acids, trinitrin, and other appropriate medication may be employed when indicated.

Nutriment being administered, digested, and absorbed into the blood, must be converted into vital forces, and into tissue. Exercise and respiration are the natural means to effect this. "Respiration," said ARBUTHNOT, "is the second digestion."

When the patient is able to carry out the instructions, and when there is a sufficiency of unimpaired lung tissue, respiratory gymnastics, and voluntary forced respiration may suffice. Ordinarily, however, these measures will not be efficient, and must be replaced or supplemented by a method which affords mechanical assistance to respiration, independent of voluntary exertion. This method offers itself in the inhalation of compressed air, a subject which will always be associated with the name of its great promotor, WALDENBURG. The air is inspired under an excess pressure, gradually increased from $\frac{1}{80}$—$\frac{1}{60}$ up to $\frac{1}{40}$ or $\frac{1}{30}$ of an atmosphere; sometimes into rarefied air. The inhalations are administered once or twice daily. At each period, ten or fifteen, twenty-five or thirty, up to one hundred or more respiratory acts are completed in five to fifteen minutes, and the process is repeated after an interval of about ten minutes.

Our general tonic medication, exercise, forced respiration, etc., will of course, assist directly, and indirectly, as emunctorial stimulants. The daily sponge bath, which, to the well, is a matter of comfort and cleanliness, becomes to the consumptive a measure of therapeusis. The drinking of water, preferably hot, is again applicable as the best of diuretics and a potent diaphoretic. Lemon juice and sugar may be added to render it more palatable, the former indeed, increasing its value as a diuretic. Nitro-hydrochloric acid is among the best hepatic stimulants in this connection. An enema is ordinarily the best method of emptying the bowels. To overcome intestinal torpor the same measures employed under other circumstances, nux vomica, belladonna, faradism, etc., may be resorted to. Among the preferable cholagogue cathartics, are podophyllin and rhubarb.

The indications thus far considered may be fufilled in the generality of cases by the following routine:

1. An abundant and proper diet, as already discussed; gavage if necessary.

2. The drinking of hot water, or hot lemonade; lavage, if necessary.

3. Moderate open-air exercise; respiratory gymnastics; daily inhalations of compressed air.

4. The administration of some such pill as this, three or four times a day: Iodoform, 1 to 2 grains, creasote one-half minim to one minim; to which may sometimes be added: reduced iron, 1 grain, or arsenious acid, $\frac{1}{60}$th to $\frac{1}{30}$th grain, the pill being made up with glucose, crude petroleum, or extract of licorice, with the addition, if indicated, of some bitter extract, such as gentian, cinchona, or nux vomica, and dispensed in capsule. Among other useful prescriptions may be cited, when iron is indicated: Compound syrup of phosphate of iron (PARRISH); tincture of chloride of iron, dilute phosphoric acid, and CHURCHILL'S syrup of hypophosphites (J. SOLIS COHEN); the officinal syrup of hypophosphites and iron, etc. Iron seems to be better borne by the stomach, and to be more readily appropriated by the red blood-globules when inhalation of compressed air is practised. Cardiac weakness, excessive febrile action, and other conditions may call for appropriate medication.

The BERGEON treatment by rectal injections of sulphuretted hydrogen gas, the author holds to be still on trial. He has no hope for it as a bacteriacide, but as a remedy for those local conditions which permit the microbe to find a suitable habitat in the lungs.

Notes.

DR. LUIGI G. DOANE, of New York, enters his emphatic protest against the views of matrimony as enunciated by the writer quoted from the Medical and Surgical reporter in last issue of the AGE. Among Americans, at least, he avers that a careful analysis of the data, as far as they can be obtained, will show that marriage is not a mere licentious compact, but is entered into for reasons quite removed from a mere desire for sexual indulgence. With the lower classes of foreigners, doubtless, woman is too often regarded as a mere breeding machine, but in the case of the American, he holds, the keen edge of passion is generally worn off before the desire for a companion, or housekeeper prompts to celibacy. He thinks that "Platonic affection" leads to matrimony much more frequently than is generally supposed.

The orator accompanying the Wild West Show in England (Buffalo Bill's) is exciting much interest because of his wonderful vocal power. This gentleman, FRANK RICHMOND, whom many of our readers have doubtless heard, can make himself heard by an audience of 30,000 people in the open air. The British Medical Journal contains DR. MYLES' description of this wonderful larynx as follows: "The vocal cords are of ordinary length, and not much above the average in breadth, but the vocal processes project inward toward the middle line like two large spurs when the glottis is open. The great leverage thus given the laryngeal muscles allows them to act to the best advantage with the minimum effort. The larynx itself is of large size, and the pharynx is exceptionally roomy and well-developed." MR. RICHMOND, we understand, is a college graduate, and we are pleased to hear of his success in this unusual field of labor.

Local medical circles of Atlanta, Georgia, were shocked by the news of the fatal termination of the illness (typhoid fever) of DR. JAMES A. GRAY, on the 27th ult. DR. GRAY was taken off at the early age of thirty-seven, just as his feet had become firmly planted on the ladder of success. At the time of his death he was one of the editors of the Atlanta Medical and Surgical Journal, Dean of the Atlanta Medical College, and Lecturer on Venereal Diseases in the same. He was also Secretary of the Medical Association of Georgia, and a man full of professional enthusiasm. He had secured a leading position in the profession of Atlanta, and was one of the younger men of whom much was predicted. He was a man of strong character, of emphatic manner and speech, and withal esteemed by the community and beloved by his patients.

DR. DA COSTA gets off the following in a recent address, in which he touches on preventive medicine. To those who read between the lines there is a suspicion of irony permeating the eloquence: Let us go on in our noble endeavors to be efficient preventers as well as efficient curers of disease. * * * * Let us go on with increased power presenting the splendid spectacle of a profession, earnestly and in its loftiness, striking at its own existence, and, for the common good, endeavoring with all its might to immolate itself." It is certainly a grand sight to behold a man immolating himself, and enticing the wolf to his door. The only drawback to the "splendid spectacle" is the wife and children in the background, to whom the "loftiness" offers a poor substitute for the necessaries of life and the conveniences of modern society.

DR. HAL C. WYMAN, of this city, had conferred on him the degree of Master of Science, by the Michigan State Agricultural College, in recognition of valuable "Researches and Investigation in Animal Physiology." This distinguished recognition following so closely on the heels of his appointment as a member of the State Board of Charities and Corrections must be very flattering to our friend. It is a case, also, in which the honors rest on worthy shoulders.

Book Notices.

ANATOMY, DESCRIPTIVE AND SURGICAL. By HENRY GRAY, F.R.S., Fellow of the Royal College of Surgeons; Lecturer on Anatomy at St. George's Hospital Medical School. The drawings by H. V. CARTER, M.D., Late Demonstrator of Anatomy at St George's Hospital. With additional drawings in later editions. Edited by T. PICKERING PICK, Surgeon to, and Lecturer on Surgery at, St. George's Hospital; Senior Surgeon Victoria Hospital for Children; Member of the Court of Examiners, Royal College of Surgeons of England. A new American from the Eleventh English Edition. Thoroughly Revised and Re-edited with Additions by WILLIAM W. KEEN, M.D., Professor of Surgery in the Woman's Medical College of Pennsylvania; Professor of Artistic Anatomy in the Pennsylvania Academy of Fine Arts; formerly Lecturer on Anatomy in the Philadelphia School of Anatomy; Surgeon to St. Mary's Hospital; Fellow of the College of Physicians of Philadelphia, etc. To which is added Landmarks, Medical and Surgical, by LUTHER HOLDEN, F. R. C. S., with Additions by WILLIAM W. KEEN, M.D.

Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

In this edition considerable alterations have been made. The Introduction of former editions has been incorporated in the body of the work, for the most part in the form of two sections—one on General Anatomy, the other on Development. These have been entirely rewritten, in order to keep pace with the ever-increasing activity of research in these branches of the science of anatomy. Some portions of the Introduction have, however, been removed from their former position and introduced in their appropriate places in other parts of the work; as, for instance, the minute structure of the spinal cord, which has been inserted, with the general description of this part, in the section devoted to the Nervous System.

The whole of the work has undergone a careful revision; many clerical errors and errors in point of detail have been corrected. In the section of Osteology an endeavor has been made to give more accurately the time for the appearance of the several centres of ossification of the bones, though this is a point on which anatomists differ, and which probably varies in different cases. In the section on Arthrology the movement or movements permitted in each joint have been carefully revised, and the muscles by which these movements are effected have been given. In the section on Myology the action of each muscle or group of muscles

has been carefully considered, and many alterations and corrections made. The anomalous muscles mentioned in former editions have been excluded. It was thought that, interesting as these anomalous conditions may be to the scientific anatomist, they were scarcely necessary, and were to a certain extent out of place in a text-book intended for the use of the student of Anatomy. The other parts of the work, and especially that devoted to Microscopic Anatomy, have been carefully revised, and some alterations in arrangement and detail have been introduced.

The whole of the arteries, veins, and nerves in the woodcuts have been colored, and it is hoped that this will give additional clearness to the illustrations and enhance the value of the work.* In the section of Osteology the dotted lines showing the attachment of the muscles have also been colored. These have all been done in one color, and not, as is practiced in some works of anatomy, in two colors, the one showing the so-called "origin," and the other the "insertion" of the muscle. It was felt that, as the origin and insertion are absolutely fixed in only a very small number of muscles, and that the greater number can be made to act from either extremity, this practice was misleading to the student, and caused him to attach too great importance to one action of a muscle which it might possess over any other.

DRUITT'S SURGEON'S VADE MECUM. A Manual of Modern Surgery. Edited by Stanley Boyd, M. B., B. S. Lond., F. R. C. S. Eng., Assistant Surgeon and Pathologist to the Charing Cross Hospital, and Surgeon to the Paddington Green Hospital for Children; late Demonstrator of Anatomy in University College, and Surgical Registrar in University College Hospital. Twelfth edition. With three hundred and seventy-three engravings.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

Many of our readers will receive the announcement of this new edition of "DRUITT" as they would that of an old friend. Few medical works are so widely known as this, and physicians of twenty years' standing are nearly all familiar with it. In England fifty thousand copies have been sold, while in this country each surgeon who served in the War of the Rebellion was furnished a copy of it by the Government. In the edition before us there have been very many changes and additions made, in order to bring the work fully abreast of the times.

These changes and additions have necessitated a very considerable increase in the size of the volume, and the nature of them will be understood when it is stated that the last edition appeared ten years ago. The past decade has been a very active one in surgery, and the advances in antiseptic and intestinal surgery have been sufficient to mark an era. They are all set forth by the new editor, who has been singularly happy in the blending of his style with that of the author. The result is a work of remarkable clearness and fullness, and such a one as will require no further recommendation to the profession.

*The American edition is published both with and without colors.

THE PHYSICIANS' PERFECT CALL-BOOK AND RECORD, from 18— to 18—. By DR. G. ARCHIE STOCKWELL, F. Z. S. Thirty two patients per page.
Detroit: George S. Davis, publisher.

With his characteristic enterprise MR. DAVIS is first in the field with a physician's visiting list for 1888. The design is by one who has succeeded, out of his own experience, in adapting a list to the requirements of the busy practitioner. Its chief merits, as claimed, are: 1. Concise information. 2. Keeping of all accounts upon one double page. 3. Placing obstetrical records in a single form, instead of two, as has heretofore been the custom. The dosage list is very complete in its enumeration of the newer additions to the materia medica, and is given in both the metric and the apothecaries' weight. Other valuable information is given for use in emergencies, such as drowning, poisoning, etc. The list is one which can be commended without hesitation or mental reservation. Its mechanical execution is simply the perfection of the printer's and the binder's art.

PRACTICAL URINE TESTING, A GUIDE TO OFFICE AND BEDSIDE Urine Analysis, for Physicians and Students. By Charles Godwin Jennings, M. D., Professor of Chemistry, and of Diseases of Children, Detroit College of Medicine, etc. Detroit: D. O. Haynes & Co.

If the importance of a subject may be estimated from the volume of literature devoted to it, testing of urine occupies a very prominent position as a means of diagnosis. There have been many little works on this subject issued of late years, and one would have regarded the field as quite well filled before the appearance of that before us. An examination of it shows, however, that it is in no sense a duplicate of any of its predecessors, but that it is the outcome of the experience of one whom careful attention has made very efficient. It is an admirable little manual and richly deserves the support of the profession.

THE PHYSICIAN'S VISITING LIST (Lindsay & Blakiston's) for 1888. Thirty-seventh year of its publication.
Philadelphia: P. Blakiston, Son & Co.

A list which has stood the test of thirty-seven years must have merit to commend it, and the hold which the one before us has acquired on the profession is quite tenacious. Although old in years, it manages to incorporate in each edition the improvements necessary to keep it abreast of the times.

Medical Progress.

THERAPEUTICAL VALUE OF THE MORE RECENT ADDITIONS TO THE GENITO-URINARY PHARMACOPŒIA.—In the London Lancet. Sept. 24th. E. HURRY FENWICK, F.R C S., thus summarizes his experiments with certain of the newer genito-urinary remedies:

Well-known drug importers placed at my command for three years an unlimited supply of the new remedies which have been advocated for the treatment of genito urinary diseases. The following few grains of wheat remain after much winnowing.

Kola (Sterculia acuminata).—A powerful stimulant; contains 2.3 per cent. of caffeine, also theobromine. In the form of chocolate I found this drug to be of great value in tertiary syphilis, where large doses of potassium iodide have to be administered. The cases of syphilis in which the chocolate was first tried were often of the worst and most neglected type, being drawn from the neighborhood of the London docks. Later work has proved its value in the well fed. Patients were able to take doses of 30 gr. to 60 gr. of the iodide without inconvenience as long as the kola was administered with it. It is now prepared in the form of a paste—"kalatina"—like cocoa paste, as it is found more effective in the liquid form. From 1 dr. to 2 dr makes a breakfastcupful; when this is inconvenient, the stick kola-chocolate is eaten. Dose, 1 dr. to 2 dr.

Salix Niger (Black Willow).—A sexual sedative of decided value; useful in ovarian hyperæsthesia, also in prostatorrhœa, spermatorrhœa, excessive seminal emissions, and enforced continence. In the latter disorders its action is good, but inferior to potassium bromide. This is, however, somewhat counterbalanced by its non-depressant qualities. Dose, ½ dr to 1 dr. Finding it of value in those wearisome cases of urethral neuralgias following gonorrhœa, I began to substitute soda salicylate for it. I was impressed by the relief this latter afforded. In cases of urethral pain in the adult, I first eliminate stone, stricture, urethral granulations, and over acid urine, and then prescribe soda salicylate (5 gr. to 8 gr) with a gratifying result.

Lycopodium clavatum.—The tincture is of real value in frequent micturition, irritable bladder, and cystospasmus, where such is not dependent upon actual disease or foreign body. It has been found useful in spasmodic retention of children. Dose, 15 m. to 1 dr. Note.—White lycopodium is an inferior substitute, but still of some value. Dose, ½ dr. to 1 dr., between bread-and-butter. Yellow lycopodium is useless.

Kava Kava (Piper methysticum).—This drug is of benefit in pyelitis, cystitis (acute or chronic), and urethritis. It is inferior to copaiba and sandal oil, but much more pleasant to take. It is of value when the oils are not tolerated. The inflammation seems to be increased at first. Fluid extract, ½ dr. to 1 dr. on a full stomach.

Stigmata maidis (Corn Silk).—Difficult to obtain at certain seasons, but of great value in pyelitis and renal colic. One case is especially worthy of notice. A patient who had suffered from renal colic and pyelitis for seventeen years was admitted into the hospital for exploration of the kidney. The patient was so relieved with corn silk that he refused operative interference. It is also of value in chronic or subacute cystitis, but in my hands it has failed in acute cystitis. Note.—The fresh infusion is the best; dose, a wineglassful. Failing in this, use the extract; dose ½ dr. to 1 dr.

Papaw, Papayotin, Papaine (Carica papaya).—Of marked benefit in syphilitic ulcers of the tongue and throat, especially when mixed with cocaine. The surface of the ulcers and the white patches (secondary syphilis) rapidly clean and begin to skin over. Lozenges have been made, which are most useful (papaine, ⅛ gr.; cocaine, ⅛ gr.; potass. bicarb., ¼ gr.) In a girl of seven with severe syphilis of the mouth (after direct inoculation) the ulceration had resisted all applications for eight or nine months, and the child had wasted considerably. A few of these lozenges produced a marked effect, the ulcers healed, and the child rapidly fattened. Mix papaine with a small quantity of glycerin and water, so as to form a thin paste, add a little bicarbonate of potash, and brush ulcers with the same thrice daily. Whatever its position may be, as a digestive ferment papaine is worthy of trial as a preventive and reducer(?) of renal calculi. Doses for renal stone, 1 gr. to 3 gr., or more, in pill or powder; to be taken with meals.

Pichi (Fabiana imbricata).—Of undoubted value in lithiasis and renal stone. One patient obtained so much relief from the hæmaturia and pain that he obtained the plant direct from Peru every mail, and made the infusion himself. In my hands it has failed in chronic cystitis. Dose fluid extract, ½ dr. to 1 dr.; infusion, a wineglassful

Cocaine.—The fresh work with this drug is to be brought before the Medical Society. Routine work: Lithotrity in the feeble was performed with a 4 per-cent. solution. Internal urethrotomy needs a solution of 20 per cent., and any vesico-urethral instrumentation one of from 4 to 20 per cent.

Naphthaline ($C_{10}H_8$).—A derivative of benzol and allied to phenol. Given with benefit in fetid urine. The micrococci speedily disappear, and the urine becomes sweet. The large doses recommended (15 gr.) are unnecessary, and produce vomiting and abdominal pain. Dose, 3 gr., cautiously increased Note.—Urine of patients taking naphthaline smells of phenol, and may remain exposed for some days without change.

Pine or Spruce Extract (Abies excelsa).—Has a slight diuretic action, and relieves renal pain unconnected with calculus. It is of use also in a bath, and as a liniment in gonorrhœal rheumatism. It is a pleasant vehicle for drugs in pyelitis and cystitis. Has proved of benefit in gleet Dose, 1 dr. in water.

Ulexine (Ulex Europæus).—"A more powerful diuretic than sparteine or preparations of sarothamnus scoparius" (Gerrard). This is to be employed with caution in stricture. One patient with stricture of old standing, after taking a pill containing 1-10 gr., had temporary suppression of urine, vomiting and fever.

Strophanthus (Kombè).—I believe there is a distinct future before caffeine, digitaline, and strophanthus as adjuvants to operations upon the vesico-urethral tract. We have sometimes to deal with partial or complete temporary suppression, and sometimes with rigors after

operative interference or even instrumentation. Caffeine seems indicated to avert the former; strophanthus the latter. Again, if we have reason to anticipate sudden flooding of the renal vessels and consequent urinary fever as the result of an operation, then digitaline, from its power of controlling the renal circulation, is indicated. Our treatment, however, on these lines must go *pari passu* with our knowledge of drugs which affect the kidney circulation or the abdominal blood pressure. I believe strophanthus has power, worthy of further investigation, in controlling rigors. I employed it on the theoretical grounds that it increases cardiac power and general blood-pressure. Five in-patients suffering from violent rigors after instrumentation, were treated with the tincture in doses of 5 m. after catheterization. In no instance were rigors induced.

Chaulmugra Oil (Oleum gynocardiæ).—Of value as a liniment in gonorrhœal rheumatism, osteocopic pain of syphilis. Its power is increased if it is mixed with lanoline. It has great influence upon some forms of adenitis, also in secondary syphilis. Dose 5 m. to 10 m. on a full stomach.

Hydrastis Canadensis (Golden Seal).—Of some use as an astringent vesico urethral injection, checking mucous discharge; worthy of trial in some forms of prostatic engorgement and enlargement. Dose, 10 m.

Damiana (Turnera aphrodisiaca).—Good in some cases of diminished sexual power, where such does not depend upon organic disease. Often of use in melancholia and depression, if of genito urinary origin.

Caroba (Jacaranda tomentosa).—Of some value in secondary and tertiary stages of syphilis. Dose, 1 dr.

THE THERAPEUTIC VALUE OF SOME MEDICINES IN THE TREATMENT OF HEMORRHAGIC CONDITIONS.—By DR. C. D. PALMER. In a paper read before the American Gynecological Society, and published in the Med. and Surg. Reporter, Oct 8th, the author referred to the fact that very few papers on the medicinal treatment of hemorrhagic affections of the uterus appeared in the eleven volumes of the Transactions of the Society. In hemorrhage from the uterus, it is important to remove the cause where this can be found. The object of the paper was to speak of the value of certain internal remedies, and their fields of utility.

No drug is more frequently used than ergot. This is beneficial in many cases, but may aggravate some. It is of service in chronic hyperæmia and in sub involution. Its effects are less marked in nulliparæ than in multiparæ. In the treatment of uterine fibroids between the use of galvanism and of ergot, the field of laparo hysterectomy must be a limited one. The hemorrhage from fungoid degeneration and from ovarian irritation is better met by other remedies. In some cases of pelvic peritonitis and pelvic cellulitis, the hemorrhage has been increased by the use of ergot.

Digitalis in appropriate cases is of service. It is reasonably reliable in uterine hemorrhage, due to cardiac trouble. In atonic conditions of the circulation, weak heart and low arterial tension, which tend to induce passive hyperæmia, digitalis may be used.

Cannabis indica has been the subject of diverse claims. The drug varies much in strength. It acts more especially on the nervous system. Its indications are imperfectly defined, and its effects uncertain.

Bromide of potassium is useful in certain hemorrhagic states. It is indicated where there is sexual excitement and ovarian congestion and irritation. It is not so useful where hemorrhage is due to uterine irritation, although in some cases of fibroid tumor the author had found it more useful than ergot.

Arsenic is of service in uterine hemorrhage. It is not prompt in its action, but in appropriate cases it is effective. It acts as a tonic, stimulating all the functions, and especially those of the skin and mucous membrane. In chronic endometritis, with or without fungoid degeneration, a course of arsenic will be of material service. It is of value in the cure of young girls when menstruation appears too frequently and continues too long. In menorrhagia, at the time of the climacteric, it is of service, although its effect is less decided than in the former group of cases. Arsenic is a good remedy in menorrhagia of malarial origin.

Gallic acid is the best representative of the astringent class of remedies, and has been repeatedly tested in hemorrhage due to uterine atony. Its large dose, unpleasant taste and tendency to disorder digestion, limit its use.

It is the custom with many to use iron in the intermenstrual period. Iron tends to promote pelvic congestion and is almost universally injurious. Where there is menorrhagia due to hyperæmia, the muriated tincture of iron is beneficial.

Viburnum prunifolium, hydrastis canadensis and gossypium have been recommended. DR. GARRIGUES has reported one hundred and thirty-nine cases of uterine hemorrhage from various affections in which he used gossypium with the result of relieving the hemorrhage in one hundred and twenty-five cases.

The last remedy referred to was hamamelis. If thoroughly tried, this is usually efficacious. The author has employed this drug with satisfactory results for six or eight years. It is not equally potent in all cases of uterine hemorrhage. For active, profuse hemorrhage it is inferior to ergot; but for slight, long-continued flux, where the blood is dark and venous, the hemorrhage being passive in character, it is the remedy *par-excellence*. This condition occurs in flabby sub-involuted uteri after delivery or abortion, in some forms of chronic endometritis, in chronic retroversion and in some fibroids. The author has also used it with good effect in several cases of vesical hemorrhage from papilloma. The best preparation is the official fluid extract in doses of a few drops to two drachms. None of the remedies here mentioned were intended to supersede local medication when that was indicated.

THE DIETARY OF CHILDREN INHERITING A TENDENCY TO PHTHISIS.—DR. J. MILNER FOTHERGILL writes as follows in the Journal of Reconstructives:

A wise and proper dietary in the nursery would have saved many a consumptive now slowly perishing, fighting a losing fight, in the Yellowstone region, the high Swiss valleys,

along the coast of Florida, or in the Riviera or in Egypt. The farmer always believes in the young cattle that has been liberally fed, or, in bucolic phrase, "well done to" in early calf life. As a physician who has had special opportunities of seeing phthisis, I prefer as patients those who have been judiciously reared in the nursery, when any risky phthisis is looming up. To supply fat to the growing organism sometimes a little cunning is necessary. The child does not like even the sight of a piece of animal fat, it revolts at the mere appearance, much less ever tries to eat it. The sweet slice of fat so toothsome and acceptable to those of stronger digestion and more capable assimilation, is repugnant to these more delicate organisms. Let that be the second fact to be borne in mind in the reformed dietary of the nursery. Fat must not be offered in visible tangible form, except as butter. It must be hidden. The potatoes must be mashed with liberal quantities of milk and butter warmed, if cream be beyond the purse. Then finely minced fat must be liberally supplied to the suet pudding (which is all the better for having some treacle in it—just enough to give it a light cinnamon-brown hue). Bread and butter pudding is an admirable nursery food. When the milk pudding is being served it is well to stir in a good lump of butter; though it must be admitted that it is detrimental to its appearance. But, surely, where is the mother who would weigh her child's existence and the appearance of a nursery pudding in the same scale? Perish the unnatural thought! Where economy is the order of the day, rice stewed with cracked bones is at once palatable and highly nutritious.

Where the assimilative powers are very feeble, then the milk pudding should be made with farina that has already made the acquaintance of heat. It is well to make it of broken biscuit. If made of equal parts of broken biscuit and ground malt, the resultant product is an ideal food, and those readers who are not prepared to take this upon trust, and require something more than my unsupported word for the fact, had best forthwith try it and let "the proof of the pudding be the eating." One proviso, however, it will in prudence be well to put in, viz., that there are some palates to which malt is distasteful; and of course, to these the pudding is a failure. And then let another fact be borne in mind by the food reformer presiding over the nursery, and it is this: malt sugar is not so distinctly or powerfully sweet as is cane sugar or beet sugar, but its flavor is finer; on the other hand, it does not so easily undergo the acetous acid fermentation. Two great matters are involved in this: (1) acidity of the stomach, and (2) dental caries. Cane sugar decomposing into acid is most favorable to the development of dental caries. The delicate children who are likely sooner or later to die of phthisis in some of its forms are prone to bad teeth. The imperfect dentine is soon eaten away. Bad teeth interfere with mastication and so is a fertile source of indigestion; while phthisis is a malady of imperfect nutrition.

Where only small meals are or can be taken at once little interludes are desirable. They should not consist of ordinary sweets made of common cane sugar, but rather of a draught of milk sweetened by malt-extract, a dry malt preparation, or the homely treacle. What unconscious genius introduced treacle into the nursery dietary? Male or female, no trace remains; and yet that individual has been the savior of many a little mite. Treacle has rather sank in public estimation of late years. It is cheap, and therefore of doubtful reputation. It is certainly rather a troublesome thing to handle; and, as our delightful friend, OLIVER WENDELL HOLMES, says, it is not very easy to pour out the last of the contents of a jug—when the contents are treacle. But granting all this, treacle has its good qualities. As said before, it is a capital addition to a suet pudding. Treacle and butter in the centre of a plate of porridge have their attractions. Yes, and their memories too, gentle reader! Then, in combination with butter, it makes toffy, and an extra ration of coffee in cold weather is an excellent practice. As simple body-fuel to keep up the lamp of life toffy is an excellent food. Rations of toffy are far more acceptable than spoonfuls of cod liver oil. Some time ago, when on the committee of the Westmoreland's Society School, I put this view forward, and the experiment of toffy in cold weather was tried and found to work capitally, the health of the children being most satisfactory; while, it is almost needless to say, the children approved of it. When toffy is suggested for a fastidious child, which loathes fat and dislikes cod liver oil, a derisive smile breaks over the countenance of the mother. It is ignorance sneering at knowledge! Knowledge can afford it. But, prejudice and ignorance to the contrary, notwithstanding, toffy is an admirable combination, and has done yeoman service to many a delicate child, as my hospital experience can testify.

APOSTOLI'S METHOD OF ELECTROLYSIS IN THE TREATMENT OF FIBROID TUMORS.*—DR. F. H MARTIN, of Chicago, says the reasons for DR. APOSUOLI'S success rest upon the following facts:

1. The use of strong currents
2. The adoption of electrodes that make the use of a strong current possible, without harm to innocent tissues and without pain to the patient.
3. The recognition of the peculiar effects of the two poles and the application of them according to requirements.
4. Accurate measurement of current.
5. Rational discrimination in selection of cases.

By the employment of a strong current, short sittings are made practicable, and definite results are obtained. While the amount of electrolytic work done does not depend upon the strength of current, but upon the quantity, definite polar action depends almost exclusively upon the strength of current.

The electrodes used by APOSTOLI are in all cases of two varieties, the active or internal electrode, and the passive or external electrode. The active internal electrode is for the purpose of concentrating the current at the point where it is most needed. This electrode may be

*A translation of the French edition of DR. APOSTOLI'S work on the application of Electricity in Uterine Therapeutics will soon be published by GEO. S. DAVIS, of Detroit, Michigan.

simply a uterine probe of platinum, insulated to the cervical point, or a sharp needle of iridium, insulated to within an inch or two of its point, which will penetrate the mass of the growth from the cervical canal. The passive or external electrode is for the purpose of completing the circuit in such a manner that the strong current shall pass through the largest diameter of the growth, and at the same time diffuse the current sufficiently to prevent pain.

When it passes through the sensitive integument, APOSTOLI uses for this purpose a biscuit of clay, moulded upon the abdomen, properly connected with one pole of the battery. For this purpose, I use an electrode of my own device. Over the concave surface of a plate of soft metal is stretched an animal membrane, which is attached to the edges in such a manner as to render the interspace between the membrane and the metal water-tight. This space, which is from one-half to one inch in thickness, is filled with warm water. The membranous surface is applied to the abdomen, and suitable connections made from the metal with one pole of the battery.

The local effect of the negative pole when employed as the active electrode with a strong current is to produce liquefaction of the tumor with which it comes in contact, and is compared to the effect of a caustic alkali. In fact, it is called and is the alkaline pole This pole, therefore, on account of its effect of rapid solution of tumors, is employed to reduce the size of these abnormal growths.

The local effect of the positive pole when employed as the active electrode, with a strong current, is to produce coagulation and condensation of the tumor with which it comes in contact, and is compared to a caustic acid. It is the acid pole. The coagulating effect of this pole is utilized with marked advantage in controlling the hemorrhage caused by fibroid tumors. Whenever the entire cavity of a bleeding wound can be reached with the positive pole of a sufficiently powerful battery by means of an electrode of platinum, the hemorrhage can surely be checked.

When a current of sufficient strength is employed to obtain the characteristic effect of the electrode, as described above, in order to be of value in the treatment of fibroid tumors, a current of from fifty to one thousand milliamperes is necessary. A current of this strength should never be used without proper means of measurement at hand. The strength of the current employed should be varied with the work to be accomplished and the extent of active surface of the internal electrode in contact with tissues to be acted upon.

This scheme of treatment, which I have not been able in the time allotted to more than suggest, is capable of producing rapid and beneficial results. The most distressing hemorrhages can be permanently checked by the coagulating effect of the positive electrode; the most excruciating neuralgic pains, so often accompanying fibroid growths of the uterus, are almost invariably relieved; the smaller tumors are removed entirely, and the large ones rapidly reduced in size by the local effect of the negative pole and the electrolytic and cataphoric action of the current passing through the growth.

The method is free from danger if properly employed. I have yet to see an untoward symptom arise from its use. Its use is accomplished without producing pain enough to require an anæsthetic. The applications are best made in the office.

THERAPEUTIC PROPERTIES OF GRINDELIA ROBUSTA.—MR. CONSTANTIN PAUL has communicated to the Societe de Therapeutique the results of his clinical experiments in regard to the properties of grindelia robusta. He recalls that this plant, indigenous to California, and which grows there in the marshes bordering the ocean, bears a blossom, resembling very much that of the ordinary sunflower, but somewhat smaller. It is a plant of the family of the compositeæ The young sprouts and blossoming extremities are covered with a sort of resin, which constitutes the active principle of the plant, and which is found again in the American fluid extract of the same. The coloring matters seem to be without action, as this resin is apparently insoluble in alcohol.

The fluid extract of grindelia has been employed in America for some 15 years. It must have a slight odor resembling that of turpentine. Fraudulent adulterations have already been made of this preparation, and there are fluid extracts of grindelia sold in parts that have no action whatever, and completely lack this characteristic odor. In America the fluid extract is administered in strong doses up to 7.5 grams in 24 hours. In France it has been principally employed for asthma, and it has been found to have a distinct and rapid action in cases of dyspnœa. MR. PAUL has prescribed it for individuals suffering emphysmatic bronchitis with abundant expectoration. Its employment produces a rapid and notable diminution of the latter, and greatly relieves the functional affection.

It has obtained equally good results in treating children suffering from spasmodic whooping cough Likewise with consumptives, by using extract of grindelia, a relief from the nervous attacks and a diminution, sometimes considerable, of the expectoration may be obtained. It is needless to add that this drug has no direct influence on pulmonary tuberculosis.

The fluid extract of grindelia seems preferable to terpine, which cannot be administered in sufficient doses without using as a solvent a pretty considerable quantity of alcohol.

Grindelia has also been proposed for the relief of growing pains. However, MR. PAUL has made but scanty experiments in this direction, and can give but few appreciable results.

In recapitulation, the fluid extract of grindelia has chiefly a marked action on the catarrhal symptoms of the broncho-pulmonary affections, and will probably be of considerable service for their treatment. It can be prescribed without inconvenience in doses of 3 to 4 grams a day. MR. PAUL generally administered 30 drops at a time, repeating this dose twice, or oftener, daily.—[Trans. from the *Repertoire de Pharmacie*, No. 9, Sept. 1887, p. 440.

DECOCTION OF LEMON IN INTERMITTENT FEVER.—DR. R. A. LANCASTER, of Gainesville, Fla., writes: "For two years or more I have been using the decoction of lemon, as recom-

mended by DR. CRUDELLI, for the prevention and the cure of intermittent fever. In many cases it 'acts like a charm,' even where quinine and arsenic have failed to prevent frequent returns of the chills. It is especially serviceable in that class of patients that we sometimes meet with, who cannot take quinine without experiencing such unpleasant symptoms as urticaria, nausea, headache, nervousness, etc. In my experience the lemon decoction has proved much more efficacious than arsenic in preventing the recurrence of the chills after they have been broken with quinine, and in one case, at least, it promptly relieved the chills where large doses (twenty grains per day) of quinine had failed to do so. About twelve months ago, PATRICK M— applied to me for treatment, declaring that he had had a chill and fever every day for a week, although he had been taking daily, under a physician's directions, twenty grains of quinine and thirty drops of FOWLER'S solution of arsenic. I stopped the quinine and arsenic and put him upon the lemon decoction, and the result was prompt relief. I met the same patient again a few days since, and he told me that he had several times had a return of the chills, but they were always promptly relieved by the lemon. He said that he never had a chill upon the same day upon which he took the lemon. In quite a number of cases where there had been a recurrence of the chills on the seventh, fourteenth, or twenty-first days, this habit was broken up by using DR. CRUDELLI'S remedy two or three days each week. My usual plan for treating the intermittent type of malarial fever—and it has been very successful—is to give, when first called, a mercurial purge; I then direct quinine—from five to twenty grains, as may be necessary to prevent the paroxysm—to be given at one dose five hours before the expected chill; every morning thereafter, until the patient is considered cured, I direct the lemonade, à la CRUDELI—to be taken before breakfast. Of course, anæmia, engorgement of the liver and spleen, or any other of the sequelæ of malaria, must receive appropriate treatment. The greatest objection I find to the lemon treatment is the difficulty of getting the patients to carry out the directions. They think them too simple to seem to be very important."—*Med. Record.*

TEREBENE IN DISEASES OF THE LUNGS.—In a paper published in N. Y. Med. Record, Oct. 8th, 1887, DR. D. M. CAMMANN reports a series of cases of respiratory disorders treated with terebene.

An analysis of the histories of eighteen cases shows that eight were emphysema, six bronchitis, three phthisis, and one asthma and bronchitis. Two cases of bronchitis, one of which had lasted for a few days, and the other for a month, were cured. Three cases of chronic bronchitis showed great improvement. One case showed no improvement after taking ten drops of terebene every four hours for five days. In this case the treatment was subsequently changed several times without any improvement occurring in the patient's condition. Seven of the cases of emphysema improved, and most of them to a marked degree. One case was unimproved after taking the medicine for two months. The three cases of phthisis and the case of asthma all improved. The time that the cases were treated varied from a few days to five months. The average length of treatment was fifty five days. The terebene was given either dropped on sugar or in a mucilaginous mixture, in doses of from ten to fifteen minims, three or four times daily, and occasionally more frequently. In nearly every case the terebene was given without any other drug. Of these eighteen cases only two, or one in nine, were unimproved. In the other cases the dyspnœa was diminished, and usually to a marked degree. In fact, dyspnœa was the symptom upon which terebene seemed to have the most uniform and favorable results. The expectoration was thinner and lessened in quantity. In eight out of sixteen cases the patients said that the urine was increased; in the other eight cases they had noticed no change. In two cases vomiting occurred, but it was after eating or coughing, and the patients themselves did not attribute it to the medicine. In two cases hæmoptysis ceased a short time after taking the terebene. I regret that it has been possible for me to use it in only two cases of hemorrhage, as the result was so favorable as to warrant its further trial.

Terebene in some of its effects resembles turpentine, but is less irritating. In one case a patient took by mistake a teaspoonful every four hours for a week without any unfavorable result (Murrell). In none of my cases were the bowels affected. In those in which the urine was increased, no signs of extreme irritation followed, even when the drug was used for several months.

In addition to the cases already mentioned, I have used terebene in forty or more cases, in which histories have not been kept, but in which the results were equally favorable.

The cases reported in this paper are not, perhaps, a sufficient number from which to draw general conclusions, but taken in connection with those already reported it may be said that we have in terebene a valuable drug. It is useful in acute cases, and in chronic cases of emphysema it seems especially beneficial in relieving the dyspnœa.

THE USE OF PISCIDIA ERYTHRINA, CALLED MULLUNGU, AS AN ANALGESIC REMEDY.—DR. CLEMENT FERREIRA, in Bulletin de Therapeutique, states that for some time and principally since the investigations of DR. LANDOWSKY, piscidia erythrina has acquired a certain reputation in the therapeutics of pain phenomena, and in your excellent report of new analgesic remedies, you give it further consideration.

Well, in analyzing the studies of this substance heretofore made, I have arrived at the conclusion that the same plant has been considered which is called mullungu in Brazil, and which for a long time has been employed in medical practice in cases where there is necessity for recourse to sedative or calming agents.

It is in the form of an extract that, as a rule, the substance is used, and the clinical observations of numerous practitioners of Rio Janeiro and of Rezende, among which I also beg to include myself, seem to establish the fact that the extract of mullungu administered in therapeutic doses, has the property of causing a

peaceful recuperative sleep, much more resembling the physiological sleep than that caused by opium and one which could be designated as a real physiological sleep, according to the expression of my eminent friend MR. HUCHARD.

In many cases where I have had to treat patients tormented by violent pains, such as are apt to occur in neuralgias, inflammatory tumors, panaris, etc., I have derived great benefit from the use of the extract of muliungu, which I have prescribed in preference to opium preparations which are less easily borne, besides the inconveniences previously mentioned.

I have also employed this remedy against the fatiguing and croupy cough of tuberculous patients, and those afflicted with spasmodic bronchitis, but the results, though marked, have not been as remarkable. The remedy has always done good service in cases of insomnia and neuropathic and anæmic patients, as well as in the delirium of certain pyrexias, which manifest themselves in subjects addicted to alcohol excess.

The practice of clinicians in Brazil confirms, therefore, on all sides and for a long time the conclusion of European savants as regards the analgesic and sedative action of piscidia erythrina or mullungu, and the practitioners should be induced ottener to take recourse to this remedy, in view of the favorable results which we have been able to obtain in all cases where it is desirable to calm pains, and consequently bringing about a peacable quiet sleep without inconvenience.

BORACIC ACID AND LEUCORRHŒA.—We have already referred to the successful results reported by DR N. F. SCHWARTZ (St. Louis Courier of Medicine, June, 1887), in the treatment of leucorrhœa, by packing the vagina with boracic acid. Leucorrhœa is an indefinite term, but it probably means in most cases, that there is a catarrhal condition of the vagina and endo cervix, either or both For these states, the standard prescription is injections, or injections combined with local applications of iodine, carbolic acid, etc., to the cervix. The results are generally fairly good when the patient can be persuaded to carry ont the treatment faithfully. But American women do not take kindly to the system of elaborate gymnastics necessary for proper douching; consequently leucorrhœas are more often not cured than otherwise. DR HAROLD N MOYER, who has tried the boracic-acid method, states (The Medical Standard) that the discharges can be stopped with from two to three applications of the acid. He says:

"The method advocated by DR. SCHWARTZ is substantially that followed in suppurating otitis; it was the success of the treatment in this latter affection that led him to apply it to the vaginal cavity The method recommended, and the one followed by the writer, is first to irrigate the vagina with water as hot as can be borne; then a speculum is introduced, and the walls of the vagina are carefully dried with pledgets of absorbent cotton Sufficient boracic acid is then poured through a cylindrical glass speculum to fill and completely distend the vault of the vagina and surround the vaginal portion of the cervix. I greatly prefer the larger crystals are held firmly in place by small tampons of absorbent cotton, supported by a large aseptic wool tampon."

Two cases are reported, illustrating the application of the method.—*Exchange.*

CREOSOTE TREATMENT IN PHTHISIS.—For many years DR J. SOLIS-COHEN has been using creosote in phthisis, not as a specific, but for the purpose of preventing a retarding decomposition of undigested nutriment in stomach and bowels, and on the same principle in which he has been using it in chronic diarrhœa for more than twenty-five years. He always prescribes the beechwood creosote, and is usually supplied with the product from Dupont's gun powder mills. The dose given is half a minim three or four times a day after meals. This dose is rarely exceeded. The creosote is given in a gelatin capsule, with powdered extract of licorice to give it bulk, and, according as the idications may demand, powdered digitalis, quinine, iron, or iodoform, or any other drug required may be added. The formula most frequently prescribed by DR. COHEN reads as follows: Powdered iodoform, 30 grains; pure creosote (beechwood), 15 minims; powdered extract of licorice, sufficient to make a mass, which is divided equally into thirty parts, which are dispensed in gelatin capsules, of which one is taken three times a day after meals. Additional capsules containing one grain of iodoform are supplied when it is desired to increase the quantity of that drug without increasing the amount of creosote. It is ten or twelve years at least since DR. COHEN has been using creosote in phthisis, alike in private, hospital, and dispensary work, and with such benefit to nutrition that he rarely prescribes either cod liver oil or syrup of hypophosphites.—*Polyclinic.*

THE TREATMENT OF CHOREA.—The multiplicity of views held respecting the correct method of treating chorea is one of the most frequent causes of embarrassment to students of medicine, for there is no one plan which is at all generally admitted to be the best. Probably the most encouraging results, especially among children, have been obtained from the employment of arsenic in gradually increasing doses; but even this popular remedy does not always maintain its reputation among those who have much experience of the affection in question. Thus DR. L. C. GRAY, in a paper communicated to the American Neurological Association, expresses his dissatisfaction with the drug after eight years' trial of its utility in chorea; and he gives it as the result of his observation that the remedial agent of the first importance in these cases is rest in bed. His main reliance was placed in this treatment, but drugs were not entirely discarded, and he found that of these dialysed iron in doses of thirty minims to two drachms well diluted, gave the best results. In addition, galvanism of the spine proved serviceable in many cases. In the discussion which followed on DR. GRAY'S paper the reputation of arsenic in chorea was sustained by other speakers, and a claim put in also for cimicifuga, of which, however, no sufficient experience appeared to have been gained.—*Medical Press and Circular.*

TREATMENT OF CANCER BY THE ADMINISTRATION OF LIME.—P. HOOD, M.D., in a letter to the London Lancet, says that instead of using oyster shells as a source of lime for administration in cancer, he would advise the oyster preparation of the London Pharmacopœia. Six grains of this may be taken twice or three times a day in a wineglassful of milk or other fluid. such as tea.

With reference to the application of an ointment containing lime mixed with perfectly fresh butter devoid of salt to an open cancer, I find that the smell of the butter is objectionable, and when cream has been substituted the objection to it is that it so hardens the lime that it is difficult to remove it from the sores. Instead, therefore, of using either one or the other of these, I recommend the following ointment:—Creta preparata, three drachms; ol. amygdal., two drachms; the lime to be intimately mixed with the oil, and then to be added two ounces of lanoline; this to be applied twice a day spread on lint. Should the smell of this ointment prove disagreeable, it may be counteracted by adding three or four drops either of essence of bergamot or oil of geranium. I find that the employment of lime for the purpose of curing cancer does not prohibit the use of other drugs that the patient may require.

GRINDELIA ROBUSTA IN RESPIRATORY NEUROSES.—DR EGAN, of Pulaski, Tenn., states that G. ROBUSTA is not only a specific in the treatment of poisoning by rhus, but that it is also a demulcent, stimulating expectorant and an anti-spasmodic. In disease of the heart it acts by its stimulating property, though not to be preferred to cactus or cereus. DR. BARTHOLOMEW says that the therapeutic applications of grindelia might be deduced from a study of its physiological action. The combination of an oleo-resin with a narcotic principle is one especially advantageous in the treatment of respiratory neuroses. The following formula has been found of most efficacy in cases of asthma and bronchitis:

℞—Fluid ext. grindelia robnsta, 2 ounces.
" " yerba santa, 2 ounces.
" " lobelia, 2 drachms.
" " stramonium, 1½ drachms.

Dose.—A teaspoonful in simple elixir, to be taken every hour during the paroxysm and three or four times daily to ward it off.—*Pacif. Med. and Surg. Jour.*

ANTIPYRINE IN BILIOUS HEADACHE.—A discovery has been made respecting the therapeutic value of antipyrine that should go far to make it a popular remedy DR. J. OGILVY, of Bournemouth, states (Brit. Med. Jour., p. 123), that in his experience it has proved of great value in the treatment of that most distressing disorder known as a bilious headache. He has found that antipyrine in 8-grain doses is wonderfully potent, not only in cutting short the attack, but in sensibly diminishing the frequency of its occurrence. The dose is given either in a wafer capsule, or simply dissolved in a little water, on the first recognition of the attack, the patient lying down in a darkened room. A second dose in an hour, and rarely a third and fourth dose are required, but generally sleep or a pleasant languor follow the first or second dose, accompanied by gradual relief from headache. No unpleasant after-effects are felt, but the appetite at once returns and the patient feels well.

The following formulæ for the relief of asthma are given by correspondents of the British Medical Journal: 1 Take of daturæ tatulæ, stramonii, cannabis indicæ, lobeliæ inflatæ, ää ʒ ij; mix with potassii nit. pulv., ʒ ij, and ol. eucalypti, ʒ ss; burn a teaspoonful in bed-room, and repeat if necessary. (Put on white paper in a saucer it burns well). Of course, the patient must observe rules of diet, going to bed on an empty stomach, lying with the chest raised, keeping the feet warm, and such like, without which few remedies will be of any avail. 2. Foliæ stramonii, ʒ iv; foliæ lobeliæ, foliæ belladonnæ, ää ʒ j, to be thoroughly ground in a mill; potassii nitratis, ʒ ij; tinct. opii, ʒ ij. Dissolve the saltpetre in the smallest possible quantity of hot water, and add the tincture of opium. Thoroughly saturate the mixed and ground leaves with this solution, and dry at a gentle heat. When dry mix well with thoroughly pulverized camphor, and preserve in a stoppered bottle.—*Med. Record.*

NEW TREATMENT FOR ECZEMA.—DR. RADCLIFFE CROCKER has proposed a new way of treating obstinately recurring eczema, which is well worthy of attention, as it does not interfere with other treatment. The method consists in the application of a counter-irritant, not to the part affected, but to other parts of the body, which have some connection with the nerve centres. The counter-irritant used is an ordinary mustard leaf, but when that is not sufficiently strong a blister is produced with liquor epispasticus. For the face alone the mustard leaf (or blister, as the case may be) is applied behind the ear; for the face and forearms apply it to the nape, and for the leg the counter-irritant should be applied on the hip over the large sciatic nerve. In most cases this treatment has been followed by removal of the itching, and the relief lasts from one to several nights. The redness and swelling are also relieved.—*Exchange.*

HYDROCHLORATE OF APOMORPHINE.—This useful salt has been extensively tried by DR. STOCQUART, of Brussels, as a remedy for certain kinds of cough, and he speaks highly of its value. The kind of cough in which it has proved most successful is a distressing and frequent hacking unattended with expectoration, or with exceedingly difficult expectoration, and the improvement of the patient's condition is usually effected in a few days. The drug is as a rule well borne, although a few individuals manifest a special susceptibility to its action, and rarely nausea, colic, and diarrhœa result from its employment. The dose is a minute one, only three or four milligrammes of this alkaloid being given in water in the twenty-four hours; and as the solution rapidly alters by keeping, it is advised to prevent its decomposi-

tion by the additional of a few drops of hydrochloric acid, which does not interfere with the therapeutic effects.—*Lancet.*

HYDRASTIS CANADENSIS IN HÆMORRHAGE.—In the Centralblatt fuer Gynækologie, No. 35, p. 561, appears in reports from the polyclinic of MARTIN on 40 cases of hemorrhage, of the most varying descriptions, treated by hydrastis, in which the remedy on the whole exhibited an efficient action. Only with cases of myoma did the hydrastis seem to be given unsystematically, as the author entirely excludes such cases. In 5 cases, the hydrastis was used in hemorrhages, with simultaneous pregnancy. In the few cases, in which the results of the medication were negative, after a slight diminution of the hemorrhage in the beginning, an increase was afterwards to be observed. The author explains this phenomenon by the hyperæmia of the uterus, which beside the anæmia, discloses an hydrastis action. In the employment of the remedy, therefore, great care is necessary. Besides being useful as a hæmostatic, it showed itself to be a stomachic of great value.

THE NIGHT-SWEATS OF PHTHISIS TREATED BY SECALE CORNUTUM.—The following translation from the Journal de Médecine de Paris is found in the Medical Herald: "MINGOT reports as to the unexpectedly favorable results obtained with secale cornutum in the night-sweats of phthisical subjects. He observed in TENNESON'S clinics at Paris that 15½ to 31 grains of ergot given in powder form, or, better, 2 fluidrams of ergotinine injected hypodermically half an hour previous to the expected appearance of the sweat, could suppress the latter for a week or even longer. No other of the numerous remedies recommended against night-sweats was, save atropine, found to have so great an effect as ergot or ergotinine. To be sure, the tubercular process is in no way influenced by the exhibition of this remedy, but it is gratifying to be able to stay one of the most annoying and at the same time weakening factors of the disease."

THE INTRAUTERINE STEM PESSARY AS AN EMMENAGOGUE.—This method of treatment had been condemned by EMMET and others, while THOMAS, GOODELL, MUNDÉ, REEVES JACKSON, WINCKEL, and others approved of it. The plan of the author in dysmenorrhœa or amenorrhœa was to use a tent of slippery elm, and the irritation and dilatation thus produced were often effective in bringing on a flow which answered all the purposes of the menstrual flow, whether occurring at the time which was appropriate in the given case or not. The method had never been accompanied by bad results in the author's experience.

The work of the Section was closed with the reading by title of a number of papers.—*Med. News*, Oct 1st, 1887.

THE ABORTIVE TREATMENT OF GONORRHŒA.—DR. O. T. OSBORNE in a paper, the N. Y. Med. Jour., Oct. 8th, thus summarizes his conclusions:

1. Gonorrhœa is a specific inflammation.
2. It is, in all probability, caused by a special microbe.
4. The gonococcus of Neisser is, almost beyond controversy, the specific cause of gonorrhœa.
4. The abortive treatment of gonorrhœa with corrosive injections is unjustifiable and unsatisfactory.
5. The only abortive treatment should be with weak antiseptic injections, combined with the constitutional treatment.

VERBASCUM IN DISEASES OF THE SKIN.—LASCHKEWITCH, of Charkow, says (Vierteljresschr. f. Derm. u. Syph.) that in the southern part of Russia this plant is much used in the treatment of itching diseases of the skin. His assistant cured a case of eczema marginatum with it in four days, the case previously having proved very obstinate to treatment. It is used in the form of a rather strong infusion of the flowers, and is applied three or four times a day to the diseased part. It shows its healing qualities on the second day.

CITRATE OF CAFFEINE IN CARDIAC DISORDERS.—JACCOUD has used the following with benefit as a cardiac stimulant:

℞—Caffeine, gr. 100.
Sodii benzoat, ʒ 2.
Aquam, ad. ʒ 8.

He prescribes from three to six grains in twenty-four hours; and in severe cases goes to twenty-five grains.—*Med. News.*

A RECTAL INJECTION FOR THE CONVULSIONS OF CHILDREN.—SIMONS advises the following:

Musk, gr. 3.
Camphor, gr. 15.
Chloral hydrate, gr. 8.
The yelk of one egg.
Distilled water, ʒ 5.

The intestine should be first emptied by an enema of oil.—*Les Nouveaux Remèdes.*

ACETPHENETIDIN AS AN ANTIPYRETIC.—Fifty cases of fever has been treated in the Vienna Hospital with acetphenetidin, the new antipyretic, and the opinion arrived at is that it is a safe remedy, causing a slow diminution of the temperature, which in from four to six hours amounts to as much as 2° C. There are no disagreeable after-effects.—*Exchange.*

CHLORAL HYDROCYANIDE is recommended by HERMES (Inaug. Dissert. Berlin, 1887; Med. Chron.) as a substitute for hydrocyanic acid, on account of its stability and constancy of composition; 6.46 parts of the compound are found to correspond to 1 part of anhydrous hydrocyanic acid.

The Medical Age.

Vol. V. DETROIT, NOV. 10, 1887. No. 21.

Original Articles.

TWO SERIES OF CASES OF STRANGULATED HERNIA CONTRASTED—THE LESSONS TO BE LEARNED FROM THEM.*

BY H. O. HITCHCOCK, M. D., KALAMAZOO, MICH.

FIRST SERIES.—Case 1.—On the 20th of August last, I was called to Richland to see MRS. J., a rather feeble woman, aged 65. She had been the subject of an irreducible femoral hernia for ten years or more, which, though not well fitted by a truss, had not given her serious trouble. On Monday, the 15th, while washing, she seized with a colicky pain in the abdomen.

She went to bed, and not being relieved by simple domestic remedies she called a physician. The pain seemed to be seated near the umbilicus. The bowels were sought to be moved, but after the lower bowel was emptied, nothing moved them. After two or three days, vomiting occurred, which soon became stercoraceous. All this time she insisted that the old hernia did not pain her.

When I saw her the tumor was small, and the skin did not look dark colored and there was little pain or soreness in it. It was firm to the feel and but little movable, its stem or root being very firm and unyielding. Her pulse was fair—not very frequent, and there was but little fever. She then vomited unquestionably stercoraceous matter. She did not seem to be suffering from shock, although the history of the case made it fairly certain that nothing had passed the hernia for five full days. From this history and the present appearance of the tumor it was thought that her only chance for life was in an operation.

Having prepared that region of the body, and hands and instruments for thoroughly antiseptic work, the tumor was cut down upon, and a thick hernial sack, of a dark mahogany color, found to be adherent by inflammatory action, to the tissues around it, and to its contents. These adhesions having been liberated all around, and the stricture loosened, the contents, not dead, though quite dark in hue were returned into the abdominal cavity. Several deep sutures of silkworm gut were passed through the edges of the femoral ring, passing also deeply through both sides of the sack. After the edges of the skin were carefully stitched with catgut, the deep sutures were well drawn up and tied, and the wound carefully dressed with antiseptic gauze, under a spica bandage.

Within an hour the bowels were moved and the patient made a steady though somewhat slow convalesence. At the end of the first week the wound was reported to me as having entirely healed by first intention, but after ten days there came on some inflammation at the site of the wound and a small abscess opened, which was then healed by granulation.

Case 2.—On Sunday, the 21st of August, a telephonic message summoned me to Otsego, to see woman suffering from acute obstruction of the bowels. The message said: "There is a bunch just below Poupart's ligament and another above it. Bring up a long rectal tube."

Going with a knife instead of a rectal tube, I found MRS. E., a woman of previous good and robust health, about 50 years of age, suffering pain in the abdomen, centering at or near the umbilicus, and giving this history:

She had for many years been the subject of a large bunch low down in the left groin, which though unpleasant had not given her serious trouble. On Monday before, while washing, she had been suddenly seized with the pain as described above. The lower bowels were moved, but with no relief to the pain. She had little or no pain in bunch in the left groin. The bowels after the first movement had not been moved in the six days, notwithstanding repeated doses of physic had been given.

She had vomited bad smelling matter many times in the last three or four days and now vomited once, and matter was clearly stercoraceous.

Below Poupart's ligament there was a flattened bunch, elevated at its centre nearly two inches, and three inches or more in diameter. It was not hard, though rather firm and tympanitic. There was a sort of extension of the bunch above Poupart's ligament, somewhat elongated in the line of the ligament. This portion of the bunch was quite hard and solid, and was not tympanitic. The skin over this part was of a dark-purple hue, looking like ecchymosis, in decided contrast to the skin below, which was rather ashy pale. I learned that the tumor above had been punctured by an aspirating needle and a little bloody serum withdrawn,

*Read before the Kalamazoo Academy of Medicine, Sept. 27th, 1887.

but with no reduction to the size or solidity of the tumor.

The pulse was fairly full and strong, though a little quickened and slightly irregular. There was very little tenderness over the abdomen, no tympanitis and no sign of shock, although there had been strangulation for nearly a whole week.

Preparation being at once made for complete antisepsis, the tumor was cut down upon the incision being about four inches long and covering portions of the two divisions of the tumor. A very large hernial sack was thus laid bare, in the lower portion of which were two or three coils of small intestine—six or eight inches—of a rather dark-mahogany hue, but evidently with the circulation not completely cut off. The upper portion of the tumor was filled with omentum, which, coming down like a wedge by the side of the gut through the femoral ring prevented perfectly the return of the gut, and completely closed its lumen and was itself turned up over Poupart's ligament, and there rested in the shape of a rather long inguinal hernia. This wad of omentum had to be drawn down before the gut could be returned, even after the stricture was loosened.

The circulation of both contents of the hernial sack not having been so completely stopped by the pressure, as to make death certain, they were both returned into the abdomen.

The sack was now drawn down, held wide open, and several pitchers of quite warm slightly carbolized water were poured into it, thus completely washing out that portion of the abdominal cavity and giving an impulse to the retarded circulation of the parts. After that, the sides of the sack being drawn well down and held were stitched together by a seam of cat-gut placed as high up in the ring as possible. Then four deep sutures of silkworm gut were passed through the fibrous edges of the opening and also through the sides of the sack above the seam. The edges of the skin were now carefully brought together and carefully stitched with interrupted stitches of cat gut, the deep sutures were tightened and tied, and the wound carefully dressed with antiseptic gauze held in place by a Spica bandage.

I learned from Dr. Clark, the attending physician, that, within a short time after the operation, the patient's bowels were freely moved, and the next day her appetite returned. The convalescence was steady and rapid, the wound healing entirely by first intention.

Case 3.—On Sunday, Aug. 28, I was asked by Dr. McNair to see with him a feeble man 67 years old, and heard from him this history. On Saturday, the 20th inst., while fixing a fence, he was suddenly seized with a colicky pain in the abdomen, which made him feel faint and produced nausea and some vomiting. The pain seemed to centre about the umbilicus. A homœopathic doctor was called, who treated him for five days on general homœopathic principles, as I suppose, but with no relief. Dr. McNair, having been called on Friday, found a small lump low down in the groin, which he thought might be the cause of all the old man's pain, as a strangulated hernia. On Saturday, Dr. Osborn saw the patient and took the same view of the case as did Dr. McNair, and proceeded to make a careful examination by the rectum. The old man being very thin and a long finger feeling no tumor through the rectum like an invaginated gut, and the patient positively asserting that he had had that bunch in the groin for sixteen years, and that it never troubled him and did not now pain him, the doctor did not insist upon an operation. On Sunday the old man was feeble, much emaciated, with a feeble, irregular pulse; tongue coated, dry, red and cracked; temperature, 102°; features pinched and sunken, and occasionally vomiting stercoraceous matter. The tumor was small and quite moveable, like a pear on its stem when firmly held, slightly red and faintly tympanitic, and at its stem or root firm and unyielding. I had no hesitancy in confirming Dr. McNair's diagnosis of the case as strangulated femoral hernia, and advising an operation, though at that time as a dernier resort for the old man.

The operation was done with partial antiseptic precautions, the circumstances of the case making it difficult to secure complete antiseptic measures.

A small loop of gut was found in an old but not much thickened sack. Its color showed that its tissues were not dead, and, after loosening the stricture it was carefully returned into the abdomen.

In loosening the stricture the knife was turned towards Gimbernat's ligament, and carefully pressed. A gush of arterial blood followed, which I took to come from an abnormally derived obturator artery,* and which I arrested in this way: Stopping the flow of blood by pressure of the finger, I called for a needle threaded with silkworm-gut, and passed on my finger, under the artery and through the tissues two or three sutures, tying them under the skin.

After thoroughly washing out the cavity, the wound was dressed as in the cases before. A movement of the bowels occurred in a short time, the vomiting ceased, as also the pain, and the patient made a slow, but complete recovery, the wound, however, healing by granulation.

Second Series.—Case 1.—I was called to Augusta on Sunday, Dec. 2d, 1883, to see Mrs.

* This abnormal derivation of the obturator artery, from the epigastric track of the external illiac, is said to occur in 50 per cent. of women and 25 per cent. of men. Wyeth's Text Book on Surgery, page 510.

M., thought to be suffering from "bilious derangement," with "threatened inflammation of the bowels." Mrs. M., aged about 40 years, had been a woman of fair health until the Wednesday before. On that day, while shopping, she was seized with a sudden pain in the abdomen. She went to stool, and had a copious movement of the bowels. She then rode home in an open carriage, six miles, in a cold day, suffering all the way with this severe pain, which appeared to be centered at or near the umbilicus. This woman had had for some years an old inguinal hernia, not well supported by a truss, but still she had not often suffered from pain in the bunch, and, indeed, thought that even now there was no pain or soreness there, and so was put to bed and treated as above indicated until Sunday. On that day she was still suffering with the pain as described above, her face anxious and pinched from the shock of the pain and repeated vomiting during the last three days of stercoraceous matter. The temperatue was 103°, and the pulse rapid and feeble, the abdomen rather tense and tender to the touch, and the old hernial tumor was of a dull, dusky red or purple. The operation was performed at once, as the only hope for the patient. Six or eight inches of small intestine was black, collapsed, and actually dead, and rupture had already taken place. An effort was made for some days to establish an artificial anus, which at first seemed to promise success; but the powers of nature soon gave way, undermined and exhausted by the days of pain, and septicemia from the abscess and the suppuration of the wound.

Case 2.—Dec. 16th, 1880, I was called to Mendon to see a man 70 years of age. He had been a robust man, descended from a long-lived family, and ten days before gave promise of reaching the age of 90 or more.

He had had a small inguinal hernia for a long time. It was not supported by a truss, and rarely gave him any trouble or inconvenience. Ten days before, while digging out an old potato pit, he was seized with a sudden pain in the abdomen; went home, took the bed, and called for a physician, a homœapathist, who had treated ever him since, as he said, "first for bilious colic," then "congestion of the bowels," and lastly for "suspected abscess in the lower part of the bowels." At once we laid open a large fecal abscess, and removed six or eight inches of sloughy gut, black, collapsed and dead, making a vent for the pent-up secretions of the body for ten days, augmented by repeated cathartics.

Ten days of such unrelieved suffering, and the poison of the pent-up fecal abscess, caused serious septicæmia, sapping the old man's iron constitution, and he died four days after the operation.

Case 3.—A man in the prime of life, had had double inguinal hernia for several years. Early in October, 1882, he was putting in his wheat and, following the drill one day, he was suddenly seized with a distress in the abdomen. He thought of his old hernias and put his hand down to each groin, but only to find them smooth and free from pain and soreness, but the distress was persistent and seemed to be located a little below and rather to the right of the umbilicus. He soon called a physician who knew of his having had a hernia on each side. After carefully examining each groin, and finding both free from any suggestion of a hernia, and being assured by the patient that neither of his hernias had been down in over two years and gave him now no pain, the physician concluded that he was suffering from a form of bilious derangement with obstinate constipation.

The pain did not seem very severe but was very persistent, and the constipation yielded to neither cathartics nor enemata. On the 9th of October, having been called in consultation I found the patient with not severe pain, occasional vomiting but not stercoraceous, the abdomen a little boardy in feeling, but nowhere sensitive to a fair examination, and no lump to be felt anywhere in its extent.

The question of hernia was again canvassed, and careful examination in both groins gave negative results.

Patient had very little fever, and indeed gave very little sign of disease except the constant distress and the obstinate constipation.

I suggested a careful continuance of the treatment and requested, if the same condition continued for two or three days, that I be called again. *Ten days after my first visit* I was called, and found the man in very different condition from that which he presented at my first visit. The abdomen was now sunken, tympanitic, and tender to the touch over its whole extent. The distress was felt in the right iliac fossa, while on careful and deep palpation a feeling was detected in the left iliac fossa, as if there were a small hard or solid tumor. Pulse was rapid and small, breathing frequent and thoracic, tongue coated, red, and dry, and the countenance had the expression of a man in profound shock.

As a forlorn hope I proposed and proceeded to make an exploratory laparotomy, opening into a peritoneum already the seat of inflammation. The operation was not done antiseptically. There was found in the left iliac fossa a bunch round and rather firm, which proved to be a knuckle of small intestine, invaginated in the old hernial sack and so far constricted as to forbid its escape. The gut was tightly adherent to the sack's mouth by recent inflammation, but was easily released from its embrace, and was found to be of very deep

mahogany color, but really not dead, notwithstanding the stricture had existed for at least twelve days.

The appearance of this tumor was as though twelve days before the knuckle of gut had really gone down into the old left inguineal hernial sack, the neck of which then held it so tightly as to be itself drawn back into the abdomen by the retreating gut, which it still held in too close an embrace, and from that point there started an inflammation which had now spread throughout the entire peritoneum.

The man died in a few hours after the operation. Had it been done a few days earlier, there is every reason to believe that the stricture would have been relieved and the life saved.

LESSONS TO BE LEARNED FROM THE FOREGOING CASES.

1. Strangulation of the contents of a hernial sack is always a condition that threatens death; even though the hernia be an old one and the stricture is not so tight as entirely to cut off the circulation, yet if it forbids the passage of the contents through the lumen of the bowel, or causes congestion and inflammation in the sack or its contents, death will result if the stricture is not relieved, or a fæcal abscess, and an artificial anus will result.

2. The sudden accession of pain in the abdomen referred to, or near to, the umbilicus, if persistent, should cause the inquiry to be made "is there a hernia?" If vomiting occurs and the pain is still persistent, especially if obstinate constipation exists, nothing excuses a physician from making a careful examination by his own hand in every place where hernia might occur. This demand on the doctor is still more imperious if these symptoms occur in a person who confesses, to having had an old hernia; and he ought not to be put off by the assertion of the patient that the old hernia has never troubled him or her, and is not now sore or painful.

3. If these symptoms exist with no other rational cause for them, the conclusion should be that there is strangulation, and if a hernial tumor be found proper and reasonable taxis should be practised; if a hernial tumor be not found and the symptoms still persist for one or at most two days, search should be made by a carefully performed laparotomy.

4. How long can we wait for a gut to unstrangulate itself from the clutch of a hernial sack? Not one hour.

No one can doubt that the lives of all these patients were endangered by expectant treatment for a number of days after symptoms of strangulation had existed, before resort to the knife was called for.

5. How long shall taxis be practised when it is ascertained that strangulation, or even constriction exists to such a degree as to close the lumen of the gut to the passage of its contents?

Let one of the latest teachers of, and writers on surgery answer.

"Taxis should not be continued longer than five or ten minutes at any one effort. It may be repeated at intervals of a half hour or hour within the first six hours of the history of strangulation. The manipulation of hernial tumor by taxis, after the first six hours of strangulation is of doubtful propriety, and after twelve hours should not be attempted."*

6. With proper antiseptic precautions and procedure, through the whole operation and the dressing of the wound, the operation for strangulated hernia at the proper time is with little danger. This danger is not so much in proportion to the *tightness of the stricture* as to the *length of time of its continuance.*

7. Soon after the occurrence of Case 3 in the second series I improved the lesson it taught me in this manner:

Dr. Snook telephoned me one morning and asked: "What shall I do in a case like this, viz.: a man with an old hernia has been suffering for some days with signs of strangulation, under the care of another doctor, who had diagnosed 'bilious colic.' At last, the day before, the man had by his own effort caused the bunch in his side to entirely go away, but still the pain and distress continued?" I replied at once: "Cut down on the place of the hernia and you will find the hernial sack and contents have been pushed in and the stricture not relieved." The doctor did this, pulled out an old hernial sack, relieved the stricture and cured the man.

8. Indeed in these days of antiseptic surgery a surgeon is inexcusable for letting a case go on with such signs of constriction of the gut without an exploratory laparotomy, and that, too, so early in the progress of the case as to give a fair chance for the saving of the life of the patient.

9. If strangulated hernias may be operated upon with little danger, but with great promise of saving life and also of affecting a radical cure if the hernia, why is it not just as safe to operate in this way for the radical cure of a hernia which is not strangulated, and yet is troublesome, especially one that is not well supported by a truss? Certainly antisepsis and the use of animal sutures render such an operation almost free from danger, and give us great chance of a radical cure, or at least of so limiting the hernial opening as to assure the perfect support of the hernia afterwards by a light and easily-worn truss.

* Wyeth's Text Book on Surgery, page 504.

REPORT ON AN AUTHENTIC SAMPLE OF 2-PER CENT. SOLUTION OF GLEDITSCHINE.

BY F. A. THOMPSON, PH. C., DETROIT, MICH.

The sealed package handed me on Friday, Nov. 4th, 1887, as one containing a 2-per-cent solution of gleditschine, was found upon opening to contain a drachm vial, bearing a label, upon which was written "Two-per-cent. solution Gleditschine, from DR. A. M. SEWARD, Bergen Point, N. J.," and stated to be a genuine solution of the alkaloid gleditschine, as made by him from Gleditschia triacanthos, Linne. The contents of the bottle measuring 60 minims of a light-amber color, and possessing a peculiar, sweetish odor and a slightly acid reaction was submitted to the following examination, limited, however, by the small volume of liquid furnished.

A definite quantity of the solution, acidulated with a few drops of hydrochloric acid, and washed with ether, gave 3 per cent. residue, which was identified as salicylic acid, by the violet color produced with a solution of ferric chloride.

The acidulated solution rendered distinctly akaline with ammonia water and shaken with ether, gave upon evaporation of the several ethereal washings and dried to a constant weight 5 per cent. of anyhydrous alkaloid, which allowed to stand a few hours became a crystalline mass, a characteristic behavior of cocaine. A duplicate estimation gave 4.9 per cent. of anhydrous alkaloid. The alkaloid, converted into a salt with hydrochloric acid and diluted with water, gave a peculiar benumbing action on the tongue, and with the common alkaloid reagents colored precipitates, similar to those ascribed to cocaine.

A solution of 1:400 produced with platinum chloride a yellowish precipitate, changing rapidly to feather-like crystals, resembling snow-flakes. Chloride of gold produced in a 1:3000 solution a distinct precipitate assuming forms resembling those of fern-fronds arranged in stellate form. These peculiar formations of crystals are characteristic of cocaine.

A small portion of the alkaloid, submitted to Vitali's test, proved the presence of an akaloid belonging to the atropine group, but judging from the faint reaction obtained, the amount must be infinitesimal.

I might add here, that I was unable after repeated trials, to prove the presence of an alkaloid of the atropine group from the several portions of alkaloid extracted from a previous sample examined, and in consequence I am disposed to think that unlike solutions were put on the market. My suspicions being further substantiated from the results of examinations of three samples obtained from different sources, namely: A 1-oz. sample contained 6.12 per cent.; a drachm vial, half filled, 4.1 per cent., and this authentic sample from DR. SEWARD 5 per cent. of alkaloid. The three solutions also varied in intensity of color.

Qualitative tests were made for chloride and sulphate with positive reactions. A few drops of the solution reduced a large amount of a 1:1000 solution of potassium permanganate, and upon warming, produced a bitter-almond odor, peculiar to cocaine (hygrin).

This sample was put in my hands to prove its true constituents, and if it differed from a previous sample examined and (see MEDICAL AGE of October 25th, 1887), I am able to state that it differs only in containing somewhat less cocaine hydrochlorate (and color), and that I was able to prove positively the presence of an alkaloid (likely atropine) belonging to the atropine group.

Since completing the previous sample, I have had pleasure in perusing the result of an examination made by PROF. F. G. NOVY, of the University of Michigan (Pharm. Rundschau, Nov., 1887). He concludes that the solution examined contained 6 per cent. of cocaine muriate and .5 per cent. atropine sulphate, calculating the atropine from the amount of sulphuric acid found, which was 0.073 per cent.

I am disposed to doubt the presence of as much as .5 per cent. atropine sulphate, or 2.25 grains to the fluid ounce, unless his solution was quite different from the one I have examined, the amount being very much larger than is generally used by oculists. From solutions made containing various amounts of cocaine and atropine, I was able to produce with the extracted alkaloids, a much stronger color reaction (VITALI'S test), with a solution containing much less than .5 per cent. of atropine sulphate and 6 per cent. of cocaine muriate, than with the alkaloids extracted from any of the original gleditschine solutions.

In conjunction with my report on the so-called Gleditschine solution, a report of a partial chemical examination of the leaves and made largely in view of producing, if possible, some of the alkaloid, may be of interest to the readers of the AGE. Messrs. Parke, Davis & Co. placing at my disposal large quantities of the leaves, I was able to make an examination, which was *unfortunately* limited by the unpromising results in producing an appreciable amount of alkaloid.

Five pounds of the leaves reduced to a fine powder, were exhausted with strong alcohol, the alcoholic percolate evaporated to a syrupy consistency, and while yet soft, was washed with several portions of slightly acidulated water. The washings were evaporated to a small volume at a very low temperature, and when cool, washed with repeated portions of ether, which removed chlorophyll and some coloring matter. The washings (ether) were

found to contain no alkaloid and to be free from any taste except that peculiar to the leaves. To the acidulated portion potassium carbonate was added, until of a decided alkaline reaction, and then shaken with ether. The ethereal solution allowed to evaporate spontaneously, the residue dried over sulphuric acid, was found to weigh about ½ of a grain. This was converted into a salt and found to produce precipitates with the alkaloidal reagents, but when applied to the tongue, produced no benumbing sensation whatever.

Obtaining what seemed in all probability a trace of an alkaloid in the leaves, I undertook the working of a larger quantity as follows: Twenty pounds of the finely-ground leaves were macerated with large quantities of prollius mixture,* from six to eight hours, with frequent agitation. The ethereal solution filtered, pressing the dregs to remove all the solvent, were shaken with a small volume of water containing sufficient sulphuric acid to make distinctly acid (after neutralizing the ammonia in the solvent). The acid solution was separated, and the ethereal again washed with water. The combined washings were allowed to evaporate at a low temperature to a small volume, potassium carbonate added, and the solution shaken with ether. The ether solution was again separated, and shaken with one-half fluid ounce of water slightly acidulated with sulphuric acid, and upon testing with alkaloid reagents, only a slight cloudiness produced, indicating the trace of an alkaloid. This solution applied to the tongue produced no effect, and concluding that the leaves contained only a trace of an alkaloid, further examination was deemed unnecessary.

Drs. B. H. Paul and A. J. Cownley (Pharm. Jour. and Trans., Oct. 15, 1887), and Prof. C. Mohr (Pharm. Rundschau, Nov. 18, 1887), also report negative results of an alkaloid, as their conclusion of an examination of the leaves of gleditschia triacanthos. It is stated (by Dr. Seward) that the green leaves contain more alkaloid than the dried, which is contradictory to the results of Prof. C. Mohr, of Mobile, Ala., who examined the fresh leaves as mentioned above.

If the alkaloid gleditschine should be produced in sufficiently large quantities to allow a study of it, we have every reason for believing that it has no mydriatic or anæsthetic action similar to the fraudulent manufactured 2-percent. solution of gleditschine.

Regarding the investigations to be made by experts under the auspices of the Medical Record (see issue of Nov. 5, 1887), I would call attention to the fact, that the examination would be more satisfactory if the leaves whether proven to be gleditschia triacanthos or not, were obtained through a disinterested party, this being a common procedure in an examination of this nature.

* Ether 13 vols., alcohol 1 vol., strong ammonia water 5 vols.

THAT "UNUSUAL FORM OF TYPHOID FEVER."

BY W. A. REESE, M. D., EUREKA SPRINGS, ARK.

The last issue of the Medical Age contained an article from Dr. Mulheron, the editor, in regard to "Typho-malarial" fever, that inadvertently brings a smile from any experienced practitioner in the South or Southwest (my own experience extending no further), in which he virtually admits the classification of typho-malarial fever, describes it very well, but says the name has been "eliminated from the list" and such a nosology is not fashionable, etc. Well, suppose it is not, it only goes to show the ignorance of those who write the books, though no less an authority than Flint recognizes it, but I think he had had a Southern experience. He should have added to the graphic description of his case, that we often, especially for the first ten to fifteen days, have a slow pulse, running say from 65 to 75, (rarely running as high as 80) to the minute, the tongue almost or quite natural, papillæ slightly raised, and tongue looking slick, or like it had a coat of mucilage on it, and after several days from the onset becomes red—often fiery red about the tip and edges, sometimes peaked, but oftener broad and flat, rarely with the brown coat or sordes, except in the latter stages, when we have the rapid pulse—running up sometimes as high as 120 or even 130; and then we have the diarrhœa or tendency to it, and tympanitis. It is not the rule that the fever is ushered in with a chill—more generally gradual and insidious, the patient scarcely knowing for several days whether he is sick or well, though there are instances of its occurrence with chill. I have often been called to them when I would be told that they had no fever, and the skin would be cool, but the thermometer would indicate 103½ to 104, and the patient able to go around and complain of nothing, but if of anything at all, severe headache in the afternoon or night. The exacerbation is often, or I believe more frequently at night. I have had many cases with the afternoon and early morning rise of temperature. I have had them to run through two or three weeks, the meanest, most stubborn fever, with a tongue almost natural in appearance, and no swelling and but little tenderness of bowels, and the doubting Thomas only needed to try his antiperiodic doses of quinine to be convinced, as an Ohio friend of mine was during the past summer. He had preconceived opinions, thought typho-malaria was a misnomer—only due to

want of prompt and energetic treatment—nothing more than a continued form of remittent fever, but a week's observation convinced him that there was still something for him to learn.

We rarely have the typhoid (enteric) fever as described by WOOD, this far South. I have only seen three cases in eight years, but our Southern typhoid or typho-malarial is just as intractable as the other, but is a distinct type, and if DR. M. will come here or any where through the South or Southwest he will see such cases as he describes, not only this year but every year. I have been seeing them for nearly twenty years. They were new to me at first, but I learned by dint of hard experience that I had something different from what I had been accustomed to on the Missouri river, where I began to practice.

Correspondence.

REGULATION OF PRACTICE OF MEDICINE BY LAW.

In the AGE, of April 25th, I find a criticism of the proposed legislation in your State to "regulate the practice of medicine." The bill was very similar to one defeated for the last time at the last session of the legislature in this State—almost identical, in fact. That it had met the same fate several times before did not deter its projectors and promoters from trying again, but the almost unanimous protest offered against its passage by physicians of all schools, and from all parts of the State, secured its defeat, as was the case in your State. I will offer the statement that regarding the class of doctors at present legalized without having complied with the provisions of this proposed law in some particular, I do not believe it is constitutional to pass any such *ex post facto* law that would make illegal that which the same power had previously made legal, and thus affecting the professional, social or civil standing of any of its citizens. And I wish to oppose the adoption of any such monopolistic laws, which only trifle with but do not remed the existing evils they are supposed to prevent.

I am anxious to express my views on this important and interminable question of medical students and state examining boards. I shall certainly differ with DR. DICKEY regarding inferences naturally and necessarily deduced from some of his statements of fact, and premises, as made in your issue of Oct. 10th and the article copied from the Medical World, to which he refers. I do not believe that either the profession at large, or the professors of our medical colleges are wholly responsible, or even largely so, for the annual addition to our numbers; but rather that the ambition to join the more genteel professions (so termed) and secure a competency easier (?) is causing a large number of Young America to forsake or neglect mechanical, mercantile and agricultural pursuits to seek fame and fortune (fickle goddesses) in the learned professions. The profession of medicine does not present, to my observation, any more instances of this kind than that of law, pedagogics or pharmacy, and scarcely many more than that of theology. I am not acquainted with a single instance of a physician urging anyone to become a medical student, and I have known of several instances of advising prospective students to give up the idea. I am very glad that with a long and intimate acquaintance with the teachers or professors of medical colleges, I have never yet met one of whom I learned or even heard of their committing such a crime as related by our brothers in the articles referred to, to say nothing of securing a majority vote of the faculty of a "reputable" college, for such a scheme, and I am proud to say that I have known of bribes which were offered being indignantly refused. I further believe that professors of medical colleges, in their public or private lives or practice, will not suffer in comparison with those of any profession, and that the two instances mentioned are only exceptions which prove the general rule to the contrary. Although one of the younger and self-styled "modern doctors" I am not one of those who believe that all the old fathers of medicine who were (in a measure) compelled to learn their profession from their preceptors and their own observation—are ignoramuses, but rather that many of them are far more worthy of the honorary title, M. D., and far better able to meet the emergencies and properly discharge the responsibilities attached to the practice of medicine and surgery, than the majority of recent graduates, even though the latter be able to add the mystical letters B. S. or B. A. to their name.

I am not one either to call it a crime to present one of these older, eminently respectable and successful doctors with a diploma representing the quite frequently conferred *ad eundum* degree.

Is it possible that this explains the situation in either of the particular cases mentioned? Was it not possible that the prominent Ohio College could be induced to grant a diploma to one who possessed another, without requiring the usual attendance, but with no thought of evil? People find no fault with classical colleges for doing the same thing, however much they may admire one who chooses to decline so offered.

I am sometimes curious to know if all would continue to favor these examining boards who now do so, if their power was extended so as to require the examination of all who are now

practicing, as well as those who are proposing to commence the practice of medicine. What guarantee can we have that these boards will be any more capable or incorruptible than the faculties of our colleges now are? Is it consistent with American liberty to compel a man to be dependent upon a decision of a few interested persons in a State, to say whether he shall have the right to enter that State and engage in the pursuit of happiness by honestly trying to earn a livelihood as a doctor? Did the possession of theoretical knowledge of itself ever make a good doctor, or knowledge of books alone make a teacher, or lawyer or pharmacist or preacher? We are quite ready to admit that it helps.

Why should physicians be so anxious to protect the "dear people" when they are satisfied as it is? I very strongly suspect that a great many of the supporters of these measures are fully as selfish as philanthropic, and do not relish the success some of these illiterate M. D.'s are having in combating disease in their localities, and thus dividing the dollars with them. "Nothing ever succeeds in this life like success" has been said, and no law ever passed or proposed will succeed in presenting to an unskillful, and thus unsuccessful physician, a paying practice or prevent quacks and charlatans from preying upon the people. Increased intelligence of the masses, however, is slowly (perhaps) but surely leading people to discard the latter and carefully discriminate in their choice of a physician. A great change has occurred in this respect in the memory of all of us. The doctor is no longer the unquestioned oracle that he once was. To this better education of the people in this respect and the natural conditions of "the survival of the fittest," and the unavoidable results of their operation, I am quite willing to trust to bring the study and practice of medicine up to the required level to be as ready for the millenium when it arrives, as other departments of science will be; and what more can we ask?

In England, one-tenth of the graduates abandon the practice of medicine, and in this country many more (exact statistics not available). Let us trust that a discriminating public will refuse to employ those not prepared or worthy, and thus compel the right ones to abandon our "noble profession."

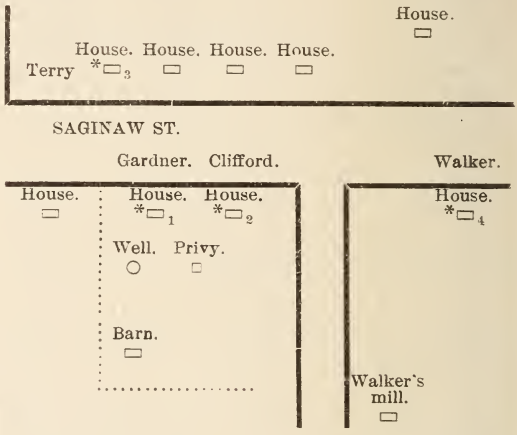
I wish we might spend more of our time in cultivating a friendly and brotherly feeling among the members of our profession and exclude unworthy men from affiliation in that brotherhood, in spite of literary or other attainments, policy or pathies, and ask for legislation to secure our earnings, that we may not be compelled to do much sanitary and other public work for nothing including, expert testimony in courts, and abandon the idea of hedging in our profession and make it a legal monopoly.

J. V. STEVENS, M. D.

PRAIRIE DU SAC, WIS.

HOW TYPHOID FEVER IS SPREAD AND HOW IT MAY BE PREVENTED.

The following is a brief report of typhoid cases occurring in the southern part of our town. Houses marked * are the ones in which cases occurred. Nos. 1, 2, 3 and 4, order of outbreak. Cases in 2, 3 and 4, traceable to water from well in rear of No. 1:



About September 1st, 1887, Myron Gardner, railroad employé, came from the south sick with fever to his father's home, No. 1 on diagram. His case was supposed to be malarial.

No care was exercised with stools in the way of disinfection, but they were thrown into privy vault in rear of house, and in close proximity to well. Wash water was thrown on the surface of the ground which was very dry at the time. About 7th or 8th Sept. a copious rain fell and soaked a sandy soil; and on the 14th Wm. Gardner and wife, father and mother of Myron, and E D. Gardner, a brother (who was a student in my office) and who boarded at home, were attacked with fever. On this day I got home from Washington, and found four of them down with a severe type of typhoid fever: and in two weeks Myron's wife and child were attacked. Also a child across the street at Terry's, who had used water from the Gardner well. About the same time, three cases in the Clifford house south of Gardner's, who also used water from the Gardner well. None of the people from either of these houses were in the Gardner house. In the Walker house, still further south, one case has occurred, and I was at a loss to account for this case till a few days ago, when the young man said that at the mill where he was working they had used the Gardner water for a few days, owing to disar-

rangement of the pump at the mill. Two others of the mill hands—Anderson and Lester—who used the same water, were attacked about the same time. Lester is now convalescent. Anderson is dead, as also the child at Terry's. When I took charge of the cases I ordered the discontinuance of water from the Gardner well, the disinfection of the stools, and no new cases are now reported. People who assisted to take care of the Gardners and other families, and who use water from other sources have not been attacked. Clearly, Myron Gardner brought the fever home, the well became infected after the first rain, from slops and privy, and the other cases got their seed from the water.

H. McColl, M. D.

Lapeer, Mich.

The foregoing instructive account of the way typhoid fever was spread, in one instance, is reproduced in the hope that it may lead others to trace the spread of this important disease, and, what is of greater importance, act intelligently for the prevention and restriction of the disease, as Dr. McColl did in this instance.

Very respectfully,

Henry B. Baker, M. D.

Office of the Secretary,
State Board of Health,
Lansing, Mich , Nov. 2. 1887.

THE GLEDITSCHINE FIASCO.

Referring to the report of an investigation of the two-per-cent. solution of gleditschine, so-called, we have since taken steps to further investigate the subject. For this purpose Mr. John Clay, of New York, on the afternoon of November 2nd, in company with Mr. C. J. Smith, called upon Dr. Seward, who was found in the drug store of Mr. Ayers, at Bergen Point, N, J.

Dr. Seward who had heard of the investigations that had been made and their results, stated that the ferment in medical circles had prompted him to telegraph to Dr. Goodman, in Louisiana, to come to New York for the purpose of straightening out this matter. As there seemed to be some doubt in Dr. Seward's mind that the solution examined by us might possibly not be part of that which he had furnished to the agents, he handed Mr. Clay a drachm vial of a two-per-cent. solution which he guaranteed to be genuine, at least in so far as he could give such a guarantee. As he has been mentioned in the reports as the one who furnished the solutions to Dr. Claiborne, we must consider this drachm vial of the solution handed Mr. Clay and Mr. Smith as authentic. Mr. Clay and Mr. Smith took the identical bottle, sealed both ends of the package, and sent same to us by express. Upon receipt of the package same was opened before witnesses by the chemist in our analytical department, Mr. F. A. Thompson, who had made the previous analysis, and Mr. Thompson has thus been able to make an examination of an evidently authentic sample of the two-per-cent. solution of gleditschine, though the quantity was rather too small to make the examination as thorough as we might desire.

We beg to submit the report of the results of the investigation. (See page 485.)

The results as given in this report seem to show that the matter has not as yet been sifted down to a satisfactory conclusion. We must suppose that Dr. Seward was imposed upon in the same manner in which, no doubt, Messrs. Lehn and Fink, Drs. Claiborne, Knapp, Jackson and others have been made the subjects of a hoax, and so far it unquestionably stands proven that a two-per-cent. solution of gleditschine so called, is not what it is represented to be. This, of course, does not preclude that in the drug gleditschia triacanthos, Linne, an active principle of some kind will be found. Even if the solution contains some gleditschine as one of the component parts, it is unquestionably a mixture, and instead of being a two-per-cent solution, it is a solution of the strength of more than six per cent, and thus not true to name even in that one simple respect.

We state the above in harmony with the facts as they have been elicited in our analytical department, without accusing any of the parties so far mentioned in the different reports, of being parties to the fraud. We trust that in the early future the imposter will be found.

Parke, Davis & Co.

Detroit, Mich.

DRUG EXPERIMENTATION ON THE LOWER ANIMALS.

It occurs to me, and, doubtless, it has occurred to others, that much valuable time has been worse than wasted in studying the physiological action of drugs on the lower orders of animals, with the view of advancing our knowledge of therapeutic action of drugs, as applied to the treatment of disease.

I have on my table before me a journal article on "The Physiological Action of Cocaine on the Common Frog, with Special Reference to its Action on Organs and Tissues." This article occupies six double-column octavo pages. The experiments on the poor, inoffensive tortured amphibian were made in the physiological laboratories of Profs. Dubois Reymond and Christian (!) in Berlin, during which the creature was dosed, dissected and shocked with electric currents until, finally, life was extinct.

A multitude of frogs were sacrificed before this series of experiments was finished. The above is not of unusual occurrence. Thousands of animals are tortured and killed yearly in studying the effects of drugs, with the mistaken idea of advancing our knowledge of therapeutics, as applied to the diseases of mankind. These experiments might advance frog therapeutics, that is all; they go no further. It does not follow that the effect of drug on a frog will be duplicated on a man. The possibilities are that the effect will be altogether different. It is well known to the laity that, "that which is a hog's food, is a man's poison," and this is found to be a fact in regard to other animals than the hog.

Let us pursue a rational course and advance our knowledge of therapeutics and materia medica by a study of the action of drugs on the human system. As a source of amusement and for general information, it may interest some to know how cocaine or any other drug affects a frog, but life is too short for the practicing physician to study the action of drugs on rabbits, dogs, frogs or other animals.

It occurs to me that our knowledge of drug effects with a view to their therapeutic use could be advanced by carefully conducted experiments on the human subject. *En passant*, I would suggest that the chemists who are introducing new remedies, constitute themselves a corps of experimenters, and test their new products on themselves, thereby saving valuable time to the busy physician. This suggestion is offered for the good of mankind and with no malice towards the chemists. Mankind, however, is under a debt of gratitude to the chemists for many medicines of great value which are the products of their skill and industry.

"The proper study of mankind is man." We cannot study man with his peculiar and characteristic mental and nervous organization, by proxy—and that proxy be a dog or a cat. Don't destroy innocent life unnecessarily.

THEODORE GRIFFIN, M. D.
KANSAS CITY, MO.

THORNY HONEY LOCUST.

As the new local anæsthetic, stenocarpine, or gleditschine, alkaloid of the honey locust, has lately been introduced in practice, I presume that any tests, if ever so insignificant, that have been made with some of the preparations of this, perhaps, valuable drug may be of some service in establishing the therapeutic action of this new remedy. I will again state my experience with it, as published in the Therapeutic Gazette of 1880, April number, p. 131.

Two cases of gleet of several years' duration, in my neighborhood, were cured, after my own and the treatment of other skilled physicians had failed, by the decoction of the bark of the root of the honey locust. The dose, I think, was about a tablespoonful three or four times daily, after meals. The treatment lasted about a month, and perfect cures were the result. The person, an old settler, who recommended this treatment told me that he had cured many cases of urethritis with this remedy, and never knew it to produce any untoward effects, except when taken in over-doses. It would then cause unpleasant feelings. He further informed me that a poultice made of the bark of the root, and applied to painful swellings, with unbroken cuticle, would give immediate relief. It should not, however, be applied to wounds or open sores, as it would cause severe irritation and inflammation.

This person further stated that as there were two species of honey locust, one with, the other without thorns, the thorny kind was the one used in medicine, the other kind being inert.

Thinking it harmless, I prepared a decoction of the root, and took a large tablespoonful of it, merely to test its effect in larger doses. The decoction is of a bright yellow color, has a pungent acrid taste, and undoubtedly possesses narcotic properties. Directly after taking this dose it caused nausea, giddiness, dimness of sight, cold perspiration, and a prickly or smarting sensation of the tongue and throat. These symptoms continued for nearly three hours, when they gradually abated. The evacuation of the bowels on the following morning was very bilious and watery, as if a dose of mercury and podophyllin had been taken. Have not tested it since.

A. CRULL, M. D.
DITTMER'S STORE, MO.

NEWSPAPER ADVERTISING.

Is it now considered professional for a physician to furnish items relating to himself and his patients, with the understanding that his name shall appear in connection, to the extent of keeping his name almost continually in the local columns of a newspaper, especially when the incidents related are trifling in character, such as that he has been invited to contribute to some medical journal; that some one was taken suddenly ill or took an over-dose of medicine, or received some injury, and each time mention that he was called? This has been practiced here until it has thoroughly disgusted every physician in town, excepting the one who is thus wooing notoriety. If it is regarded as legitimate professional enterprise, we do not want to be lacking that quality. The advertising value of the "Potter's field," known as the local column, is certainly very great. It costs nothing to thus advertise, and the physician with a fertile imagination can easily render the most trivial items of his prac-

tice sufficiently blood-curdling to secure the good will of the editor, who likes to be "helped out," and by making himself the hero of his exploits or tragedies, as the case may be, win renown and many ducats from those whose morbid appetities crave such fodder, but who would not take the trouble to read a plain, straight advertisement.

W. C. HUNTINGTON, M. D.

HOWELL, Mich.

QUARANTINE DOES NOT DEAL WITH THE MOST DANGEROUS DISEASES.

Relative to the persons who brought scarlet fever to Sutton's Bay, Mich., and who came on the S. S. Ohio, reaching New York, Sept. 30, 1887, DR. WM. SMITH, health officer of the Port of New York, says:

"Developed cases of diphtheria and scarlatina arriving on vessels at this port are removed to Ward's Island. It is impossible under the law for the health officer or the authorities at Castle Garden to quarantine persons who have been exposed to the contagion of those diseases; consequently the sick on board vessels during the voyage, doubtless, often infect the relatives or those with whom they come in contact **** and who carry the latent contagion to interior communities. I would be glad if the law allowed those exposed to the contagion of these diseases to be held for observation, as is the case when persons are exposed to the contagion of small-pox."

The instance mentioned above is an illustration of what DR. SMITH says,—the child having been exposed during the voyage and taken sick with scarlet fever the day after arrival at New York; so the infected child went on its way, to spread scarlet fever. In Michigan at least, ten times as many deaths occur from either scarlet fever or diphtheria, as from small-pox.

Is it not time that the whole subject of quarantine was investigated by the States, and by the United States government, with a view to protecting the people of this country from the introduction of the really dangerous diseases?

HENRY B. BAKER, M. D.,
Secretary.

Office of the Secretary of the Mich.
State Board of Health,
LANSING, MICH., Nov. 3, 1887.

ANTIPYRINE AND ANTIFEBRINE.

During the past three months I have given the two new antithermics, antipyrine and antifebrine, quite a thorough and extended trial in typhoid fever, and am so much pleased with their action that in the future I will not be without them.

I first tried the antifebrine in 15 cases, and three of the cases were very serious. In one the temperature on the morning of the fifth day was 105.5° F., and during the case there was so much subsultus that the jaw had to be held by the physician's hand while taking temperature in the mouth. I gave the antifebrine in 5-gr. capsules, four or five a day, according to the effect produced. In the last 15 or 20 cases I used the antipyrine. In some cases I gave it in combination with quinine sulph. I used this combination very freely:

Quinine sulph., gr. xxx.
Antipyrine, gr. xxx.
Capsici pulvis, gr. v.
Met. ft. capsules No. 10.
Sig. Take 4 a day, 3 hours apart.

Sometimes, when indicated, I added a drachm of bismuth sub. nit. to the above. Very frequently I gave the antipyrine in the shape of a solution, as follows:

Antipyrine, gr. vii.
Aq. cinnamon, ℥ ii.
M. et sig. Teaspoonful every one, two or three hours, owing to height of temperature. Give until the patient sweats, or fever is down.

I like the antipyrine the best, although I am not sure that I ever saw any bad results from the other, and if I could not get one, would unhesitatingly use the other. The antipyrine has the advantage of being very soluble, while the other salt is much cheaper. To sum up, I think both remedies are great discoveries in therapeutics, and can't see how the modern physician can get along without them.

J. Z. SCOTT, M. D.

SCANDIA, Kansas.

The Journal of Reconstructives has a note to the effect that a certain California wine company supplied the wines used at the buffet banquet given to the late International Medical Congress, and that both foreign and American visitors never suspected that they were not a European vintage. The charge that American wines were palmed off in the manner and on the occasion charged was made at the time by the enemies of the Congress, and it was considered sufficiently grave to draw forth from DR. A. Y. P. GARNETT, chairman of the local committee, an emphatic denial. We sincerely hope DR. GARNETT was not himself imposed on. The wine was excellent as we can testify from experience with a small sample of it, but to create a suspicion that it was not European, y' know,—perish the wicked thought.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., NOV. 10, 1887.

Editorial.

ADVANCE THE STANDARD.

From our editorial sanctum we can look over the further boundaries of the professional field, and it has given us great satisfaction to note the tendency toward scientific methods, on the part of the medical profession, becoming more and more emphasized from year to year. The excessive polypharmacy of the olden time has given way to the more exact medication of to-day. The inert and doubtful herbs, and those of variable quality have been replaced by extracts and other preparations in which the standard amount of active principle is maintained.

The registration of cases in the hospitals and in the private practice of the better classes of practitioners, has led to a more accurate observation of the sick on the part of both the physicians and attendants, and the long hours of the night, which have hitherto, as a general thing, made no sign, are made to tell their tale of temperature and pulse at the morning visit.

In how many cases of puerpural septicæmia has there not been a rising to 105° F., between 12 and 2, a.m., and which was not suggested by the morning and evening temperature of 101°.

Sir James Paget, in his address in October at Owen's College upon the utility of scientific work in practice, says: "I have seen enough to make me sure that they who, whether they know it or not, do their work after a scientific manner, are the best practitioners, and contribute most to the general increase of knowledge, * * * and that whoever will thus work will be all the more useful to his patieuts whatever kind of practice he may be engaged in."

Sir James, after a busy professional career at the great metropolis of more than fifty years, is an authority whom all who have read his delightful medical papers readily believe, and when he says that "none find so much time to spare as they that have too much to do, and do it with all their might," we cannot help thinking how accurate on this subject has been his observation.

It has always been the working bee in the professional hive that has stored up the honey in the honey-comb for future use, while the lazy drone has only gathered enough for daily service, all unmindful of the future.

In this connection we welcome the simplification of methods as a sure indication of correct observation in medical practice.

As in the higher mathematics the most simple solution is sought, so in the most scientific work the arms of precision are used to obtain results.

In the treatment of typhoid fever and pneumonia the most dangerous element is the long-continued condition of hyper-pyrexia, and the regular reduction of this excessive temperature by the systematic use of the cold bath is rapidly becoming the practice. The simplest methods are always the best, and the more highly educated the profession and the people become the more nearly will they conform to natural laws. Broad is the way and wide is the gate that leadeth to destruction, and down its rapid descent will you find driving at furious pace the routine vendor of pills and potions; while up the straight and narrow road, with his case-book under his arm and his instruments of precision, in his neatly enamelled leather satchel, in his hand, and with an attendant carrying his antiseptic bags and bottles, will be seen the member of the society of close observance.

In keeping with this reaction from too much medicine, and too much mysticism, and the trade methods, there is a growing conviction on all sides that to qualify the coming physician for his work, not only is the literary course of a four years' university curriculum necessary as a prerequisite, but an additional year to the three years' course of medical instruction now afforded by our best medical colleges in this country is required.

We are interested in noting the fact that the University of Michigan has not been derelict in this matter, but is moving with the times, and not satisfied with the three courses of lectures of nine months each, already required, and the establishment and development of large and important laboratories of pathology and hygiene, in addition to those of chemistry and physiology, and histology and microscopy, so successfully maintained these many years, is about to add a fourth year (optional) to its curriculum, to be devoted to clinical observation and clincal lectures in this city. "All things come to him who waits," and the clinical opportunity has arrived. The regents authorize it, the faculty desire it, the students applaud it, the State endorses it, the city welcomes it, and not the faintest peep-cheep from any medical cock-sparrow is heard in opposition to it.

Flowing out with the ink from our editorial

quill are the best wishes for the success of the fourth-year course, professors, students, and all, "Palmam qui meruit ferat."

PERSONAL--DR. JOHN BOICE.

At a special meeting of the Students of the Detroit College of Medicine, at the College, on Wednesday, the 26th ult., the following preamble and resolutions were unanimously adopted:

WHEREAS, PROF. JOHN BOICE, one of the members of the Faculty of this College, is about to sever his connection with this school and to take his departure from the city, and

WHEREAS, Under his tutorship we have learned to respect him as a gentleman and to admire him as a tutor, thoroughly qualified, conscientious and expert in his department, therefore we, the students of the Detroit College of Medicine, have

Resolved, That we regret extremely the necessity which compels the severance of the tie that has so long existed between us as Professor and students; as his expertness in the details of his special department, his success in all operations performed by him and his careful and painstaking methods of imparting to us the knowledge thus gained by him during his long and varied experience, have combined to render his resignation from the faculty a matter of sincere and earnest regret; and we take this method of conveying to him our sorrow at his departure and our best wishes for his unbounded success and prosperity in the field into which he is about to enter.

Resolved, That a copy of these resolutions be forwarded to the medical press for publication.

CHARLES DAVISON,
Pres. Senior Class.
GEORGE TAPA,
Pres. Junior Class.

We cordially concur in the sentiments expressed in the above resolutions, and we are convinced that DR. BOICE carries with him the best wishes of the profession of this city. By his quiet demeanor, genial disposition and studious habits, he has attached to him many very warm friends among both the profession and the laity, who will regret to learn of his removal.

DR. BOICE will remove to Denver, Colorado, having accepted the chair of Surgery in the medical college of that city. We congratulate both the faculty of the college and the profession there on his accession to their number, and confidently expect to hear that his labors among them are successful beyond the ordinary measure of success.

DEATH OF MOSES GUNN.

Our readers will be shocked at the news of the death of DR. GUNN, which occurred at Chicago on the 4th inst. For over a third of a century he had been prominently connected with the two largest and most widely known medical colleges of the west—the University of Michigan and Rush Medical College, of Chicago—and had thus established a very extensive personal acquaintance with the profession of this section. His ability as a surgeon and as a writer, moreover, served to extend his reputation to all sections of our country, and to cause him to be regarded abroad as one of the ablest men of his day. Few men of the past quarter of a century have taught surgery to so many of the practitioners of his country, and the death of no teacher will be more generally mourned.

DR. GUNN was born in New York state, April 20th, 1822. He was of Scotch ancestry and was able to trace his family through a long series of lairds into a very remote past. He was graduated at Geneva medical college in 1846, and immediately afterward removed to Ann Arbor, Michigan, where he commenced practice. He brought with him from Geneva a cadaver and at once commenced to lecture on anatomy, his class being composed of about thirty students and practitioners. He gave three courses of lectures on this subject, and on the organization of the medical department of the University he was appointed to the chair of anatomy and surgery, which position he occupied until 1867, when he resigned to accept the chair of surgery in the Rush Medical College, of Chicago. In 1853 DR. GUNN removed to Detroit, whence he visited Ann Arbor twice a week to attend to the duties of his chair. It was while living here that he lost, by drowning, his eldest son, GLYNDON, aged 16. This son was a youth of great promise, and his untimely death cast a cloud over his father's life which the subsequent years did not suffice to remove.

DR. GUNN was a man of striking appearance and imposing presence. He was, moreover, a high-toned gentleman and very punctilious in all matters of personal and professional conduct. He was one of the old school, whose number is rapidly growing smaller.

The Southern California Practitioner refers to the infants' foods on the market as "drug store cows'" which it has by no means a partiality for. Their use, it says, is productive of too many "skinny little angels that will have to be fattened up before wings can be fitted on them." This is certainly a unique and quite expressive way putting it.

Notes.

A FABLE WITH A SHARP POINT.—The following is going the rounds. We do not know where it started, but it is good:

A recent graduate, who had but lately ceased to manipulate a plow, was basking in abundant leisure, when he was accosted by a lacerated uterus.

"Are you a doctor?" asked the uterus.

"Yes," replied the recent graduate, "let me sew you up."

"Hands off!" exclaimed the lacerated uterus, holding up her fallopian tubes in horror. "I have been sewed up too much already, and what I come here for is to know why you doctors can't let me alone. Once I was young and handsome (here the lacerated uterus sighed so loudly that the recent graduate murmured 'physometra'), but a long course of local treatment, injections, swabbings, applications and operations have left me in this disfigured condition. Why are all the ills of humanity heaped upon my neck?" continued the uterus, wiping her lips with the fringed extremity of her left fallopian tube. "Why am I responsible for everything from consumption to corns?"

At this moment a rectum came strolling along with his hands in his pockets, just in time to hear the last remark of the lacerated uterus.

"Rats, sister!" exclaimed the rectum.

"Brats, you mean," said the recent graduate, at which the rectum winked, but he continued.

"Rats, sister! it is I with my little pockets that have to bear everything. My papillæ are cut off for paralysis, and my pockets are cut off for boils, and my sphincter is stretched for headaches, and I am maltreated in every way for the ills of other organs." Here the rectum sighed in an audible manner.

"Pockets! Papillæ!" exclaimed the recent graduate in a frenzied tone. "Great heavens! Let me cut them out."

"Not much," said the rectum, and he rubbed one of his piles in a soothing way. "I have seen too much of it already. Only yesterday my brother arose from his downy bed after such an operation, very much disfigured, but still in the ring."

"Brother," said the lacerated uterus, "possibly your words are true, and I am going to have a protracted rest. But I must be going; will your hemorrhoidal highness accompany me?"

"Certes," said the rectum, with a smile upon his wrinkled countenance, and together they went out, leaving the recent graduate searching his pocket with an air of anxiety for a nickel wherewith to purchase beer.

"I would I had some gold, besides aurum 3ox," sighed he, as he failed to find the elusive coin. Then, falling into an empty chair, the recent graduate assumed an attitude of acute despair.

PROF. SAMUEL D. GROSS says in his autobiography: "To accomplish great ends demands patience, perseverance, unswerving application, order and system, and a definite aim —in a word talent rather than genius. The only genius I possess is the genius of industry; if I have any other I have not been able to discover it. The position which I have attained in my profession has been achieved by hard blows, by no special intellectual endowment, by no special gifts from God, by no special favor from man, but by my own unaided efforts, continued steadily and perseveringly through a long series of years, during which a kind Providence afforded me sound health, lofty ambition and unflinching fidelity to my profession." "I never spoke ill of a professional brother, or did anything directly or indirectly to undermine his standing with his patients, the profession or the public. On the contrary, I have often gone out of my way to sustain and defend him; sometimes, I fear, when silence might have been the correct course."

In spite of the repeated denials of its malignancy by DR. MACKENZIE, who enjoys the distinction of having been called from England to treat the Crown Prince of Germany, the growth in the royal patient's throat is cancerous. The German surgeons in attendance, as counsel, insist on the necessity of the removal of the larynx, but to this procedure DR. MACKENZIE has not yet given his assent, although the press dispatches declare that he has been compelled to concede that the growth is malignant. The Crown Prince himself maintains the greatest self-possession, and has declared his intention to submit to any procedure which the doctors may eventually agree upon. The announcement of the true nature of his ailment has created great consternation throughout the German Empire.

The Daily News, of Chicago, recently published cuts of the medical college professors of that burgh. The array was certainly not calculated to impress the outside barbarians with a lofty opinion of the beauty of the Chicago doctor. The News was itself ashamed of him, and in this manner glosses him over: "The medical profession of Chicago may not possess many living replicas of ANTINOUS among its members; but what they lack in personal pulchritude they more than make up in skill and professional attainments." In other words, we are to understand that the Chicago doctor is like a singed cat—better than he looks.

VIRCHOW, the pathologist, held an autopsy on the remains of CARL SCHRŒDER, the gynecologist, and found an abscess of the brain which must have existed for several years, and one in the œsophagus. They were supposed to be due to the entrance of a drop of pus into one of his eyes during an operation five years before his death and which though washed out immediately, set up a violent inflammation of the organs which subsided in due time, but a portion of the virus was evidently carried into the brain where it worked the mischief referred to.

There is an ancient saw to the effect that "You cannot get out of a bottle more than you can put into it." The editor of the Indiana Medical Journal disputes the correctness of this dictum. Headaches, sick stomachs, hob-nail livers and cirrhotic kidneys, he says, which were never put into a bottle are not infrequently gotten out of them. Since his discovery of this important fact our contemporary has sworn off.

The Peoria Medical Monthly touches lightly on some recent doings of certain Philadelphia doctors, and wants to know whether that city is still called "the city of brotherly love."

Book Notices.

DISEASES OF THE HEART, Vol. I. By DUJARDIN-BEAUMETZ, M.D. Translated by E. P. HURD, M.D. GEO. S. DAVIS, Publisher.

We never take up a work from the pen of DR. DUJARDIN-BEAUMETZ without experiencing benefit and a decided feeling of admiration. His style invariably exhibits the man of science, with a lucidity characteristic of the models in this department of merit. The author can not only deal effectively with the principles of this subject, but analyze the details with a keenness as instructive as it is pleasing, making the whole a picture highly intelligible and symmetrical. We see also a systematic approach to his themes, a useful collation and comparison of his facts, connected with a skill in generalization truly rare. From his well-stored mind the reader is frequently presented highly important truths as well as pertinent and sound reflections. His clear experiments with the reliable conclusions drawn from them give great weight to his statements, rendering them particularly serviceable to the ordinary practitioner. In his descriptions of diseases, with their appropriate treatment, no obscurity or inconsistency appears, his recommendations and prescriptions being easily practicable.

The present work treats solely of valvular affections of the heart, and the complications therefrom arising, and a better exposition of the nature of those troubles, as well as the most appropriate treatment could not be found. Indeed, any physician with the aid of this volume, assuming the exercise of proper judgment, should be able to treat them with benefit to his patient and credit to himself. The rules laid down as to the curative sphere of digitalis and the right method of administration, should be treasured by the practitioner not already familiar with them. In DUJARDIN-BEAUMETZ'S treatment of compensatory changes in the course of mitral difficulties, he has hardly, in our judgment, laid sufficient stress upon the importance of OERTEL'S counsel, which the latter and his followers have found so advantageous. Mountain-climbing, carefully watched, gradually increased as the compensatory changes set in, or later, to maintain the muscles of the heart in good condition, has proved in many cases of the utmost benefit. In our practice we have observed the usefulness of this treatment, even in the stage of granulo-fatty degeneration. In aortic troubles, however, this treatment is decidedly injurious. OERTEL also urges the limited use of liquids. Where anasarca exists, the urine generally increases, despite the limitation of drinks.

Like DUJARDIN-BEAUMETZ, we have found digitalis beneficial in dilatation of the heart, though not more so than chloral in five-grain doses. Nitroglycerin has also been decidedly useful when Bright's disease co-existed. Among the hydrogogue cathartics he advises, in cardiac dropsy, is not mentioned elaterium, which, in this country, is considered the king of that class of remedies.

DR. HURD has performed his work of translator of these justly celebrated chapters, of an equally celebrated volume, in an admirable manner. The words of French coinage which appeared in his previous translation have vanished from this one, enabling the reader to admire a clear, crisp, vigorous English, free from any foreign flavor. Indeed, the skill shown by the translator is apparent to the French scholar, in every page. The introduction or preface by DR. HURD, also deserves careful perusal as containing therapeutic measures introduced into practice since the appearance of DR. DUJARDIN-BEAUMETZ'S work, and which no physician desirous of doing his best for his patients can overlook. The foot-notes contain a stock of details covering the most important phases of the subjects treated.

This work cannot fail to become popular as soon as its merits are discovered by the profession and the public. Its price puts it within the reach of every one—25 cents. A handsome paper cover and clear print in agreeable colors are among the book's attractions. We await with unusual interest the appearance of Vol. II of the present series of Diseases of the Heart.

Researches in Electro-Allotropic Physiology. Uses of Different Quantities of Electricity to Cure Disease. By Jerome Kidder, M. D. Published by the author, 820 Broadway, New York. Eight vol.; paper.

No physician is fully equipped for his daily battle with disease who does not appreciate and know how to apply such a valuable aid to treatment as electricity has shown itself to be. Electricity as a therapeutic agent has continued to extend its sphere of usefulness in therapeutics until to-day there are few morbid states in some condition of which electricity cannot be used to advantage. This little treatise, therefore, will be most acceptable to those physicians who are not thoroughly informed as to the range of application of electricity in medicine, and the method of its employment.

The author presents not only a detailed description of the electrical appliances, with the manufacture of which he has for so many years been identified, and many practical hints as to their proper employment, but also has compiled from medical literature reports of many interesting cases in which electricity has proved of service. The brochure is neatly gotten up, freely illustrated and fully indexed.

Therapeutic Brevities.

A Useful Application for Diphtheria.—Simon applies the following, hourly through the day, with a camel's hair pencil, to the throat of the patient.

℞ Salicylic acid, gr. viij,
Decoction eucalyptus, ʒ xv,
Glycerin, ʒ vijss,
Alcohol, ʒ iij.
M

As the decoction of eucalyptus is not commonly used in this country the fluid extract or oil may be employed in appropriate strength. —Revue de Clinique et de Therapeutique.—*Medical News.*

Salol.—In addition to the many other forms of disease in which salol has now been employed, Dr. Leichenfeld, of Berlin, has used it in cystitis and pyelitis with good effect. He has given daily doses of from two to three grams. In old ulcers of the leg, applied externally, it is said to bring about rapid cleansing of the sores, and in a case of obstinate chancerous ulceration rapid healing took place. It has also been employed in eczema, pruritus, pediculi, scabies, etc. The following are recommended as useful formulæ:

Salol, 0.5 grm.; amyli, 0.1 M. ft. pulv. To be compressed into a tablet.

Salol, 0.5–5.0; amyli, 50. M. ft. pulv. For a dusting powder.

Salol, 0.4–4.0; ol. olivæ, sive adipis, sive lanolin, 40. M. S: For external use.—*London Medical Press.*

For Stomatitis.—The following gargle is recommended by Monin in this affection:

℞ Acidi borici,
Acidi salicylici, ää gr. xv,
Potassii chloratis, ʒ ij,
Glycerini, ℥ iss,
Essent. myrrhæ, gtt. xvi,
Aq. aurantii flor., ℥ ixss.
M. Sig.—Use as a gargle.
—*L'Union Medicale—Medical News.*

For Burns on the Eye Ball.—

℞ 91. Atropine (uncombined alkaloid), 0.10 part.
Cocaine, 0.05 "
Oleic acid, 1.00 "
Olive oil, 9.05 "

The alkaloids are dissolved in the oleic acid by means of a water bath, and the solution is then added to the olive oil, warmed. This formula is employed in the Massachusetts Eye and Ear Infirmary.—*Pharmaceutical Record.*

For Pediculi Pubis.—The washing of the parts with ether is said to be a sudden and very effective cure for crab lice.

Bartholow recommends the following lotion:

℞ Hydrargyri chlor. corros., 1 part.
Alum, 20 parts.
Starch, 100 parts.
Water, 2,500 parts.

In case the pruritus comes from the presence of animal parasites, a mercurial treatment is advisable. The black or the yellow wash, or mercurial ointment may be used. The common sulphur ointment is powerful enough to kill the ordinary *Acarus scabei.*

Salix Nigra, or pussy willow, according to Jonathan Hutchinson, is an excellent remedy for ovarian pain, hemicrania and the nervous symptoms peculiar to women suffering from sexual disorders, and for nocturnal pollutions in males. A half drachm, three times a day is the dose. The use of the drug was originated by Dr. Paine, of Texas.

Medical Progress.

AN UNRECOGNIZED CAUSE OF MANY THROAT AILMENTS.—It is now some ten years since I first sought an objective explanation of the condition known as *globus hystericus*, and since I commenced to make a systematic examination with the laryngoscope, of every patient who came to me with this symptom. The result was communicated in a paper to the Congress of Laryngologists held at Milan in 1880. I found that but very few cases indeed are of a hysterical character—that is, of the nature of phantom sensation—though uterine or ovarian disorder is a not infrequent predisponent, or, at least, concomitant of the throat condition in the female sex.

Extending the term *globus hystericus*, I find that, with hardly an exception, all and every other subjective sensation in the throat is symptomatic of an objective cause. The chief of such feelings are those of a heat, a prickling, a swelling, a weight, a straw, a hair, or other foreign body. A few patients—one especially, a hale farmer—have complained of a feeling of intense cold, which is sometimes relieved, sometimes aggravated, after food-taking. In some instances there is actual pain with spasm, cramp, and a sensation of choking, and not infrequently there is cough; this symptom varies in degree from a slight hacking, to the loud hyena-like bark known as nervous laryngeal cough. Many of the cases of so-called laryngeal vertigo, or, as I prefer to call it, of laryngeal epileptiform seizures, are capable of explanation and cure, on the lines I am at present taking.

On examination of the throat of a patient with symptoms such as I have described, one may or may not see chronic congestion and relaxation of the fauces and uvula, enlargement of the tonsils or obstruction by caseated material of the orifices of the crypts, granular pharyngitis, or even laryngeal hyperæmia. Where any one of these conditions is present, treatment thereof may or may not give relief; but none of them represents the class to which I would draw your attention, namely, that in which there is no generally recognized morbid state of local significance.

The results of laryngoscopic investigations in my hands have shown that there is:

1. A varicose, and even truly hemorrhoidal, condition of the veins at the base of the dorsum of the tongue, sometimes at the under surface and sides, in which last case it may be symptomatic of mitral insufficiency, or of severe hepatic derangement, or even of cerebral lesion. There is often a similar varicose state of the vessels in the superior surface of the epiglottis.

2. An enlargement of the circumvallate papillæ at the back of the tongue, causing the epiglottis to be hindered in its movements —imprisoned, as your President first called it.

Just drawing attention to the fact that the structure of these glands is very similar to that of the tonsils. I may mention that in a few instances I have seen actual blocking of the orifices, similar to the condition known generally as chronic follicular tonsillitis.

I may also note that it is not possible to see these things either with a tongue depressor or in the laryngeal mirror as ordinarily employed. Many observers, especially beginners, seem to consider that their sole aim is to see the vocal cords, and, if these are sound, they write down, "larynx normal;" but they omit to look well to the frame-work. To see this condition of lingual varix and glandular hypertrophy, the mirror must be placed quite high up in the throat.

Where, as is often the case, there is no actual or noticeable enlargement of the thyroid gland, it will be observed, on passing the hand gently over the front of the throat, that there is a distinct fulness of the thyroid isthmus. If the least pressure be made at this situation, the patient—not necessarily a female—will complain that the abnormal sensation is at once excited, and, on being questioned, will admit that when it occurs the collar is felt to be too tight for the neck.

Inquiring into the general health, and happily failing to find any of the more serious lesions to which I have alluded, it will be noted that habitual constipation and a generally defective circulation are both frequent symptoms; while in others there will be concomitant evidences of a varicose diathesis, as rectal hemorrhoids, varicocele, or varicose veins of the extremities.

In females the menstrual flow is often morbidly frequent or excessive, and there are other evidences of an enfeebled vasomotor control. Abuse of alcohol and tobacco are excitants of the condition, and in the case of singers or public speakers, defective methods of filling the lungs—forcing the lower registers upward, or other functional fault which may lead to undue strain on the palato-pharyngeal muscles and engorgement of the vessels in this region—are fruitful predisponents.

In this connection, I may refer to the accurate explanation offered by your fellow-citizen, DR. CARL SEILER, of the etiology and pathology of chronic pharyngitis when occurring to voice users.

Some of those obscure cases which come under our occasional notice, of the presence of small quantities of blood in the mouth, or of the taste thereof on rising from sleep, will be explained by the leakage of one or other of these enlarged and hemorrhoidal venous capillaries in the region now under consideration.

A few words as to treatment. If the case is not of long standing or of aggravated character, correction of the main constitutional cause—cessation of the faulty method of voice production, or prohibition of a vicious habit or indulgence—may be sufficient to effect a cure, but this is rarely the case. Of remedies, I give chalybeates and aperients, with digitalis or ergot, as may be indicated. Locally, astringent applications, especially of chloride of zinc or perchloride of iron, are by no means without avail; they can be applied by the patient himself. Gargles as ordinarily employed are useless, and occasionally are productive of exacerbation of the symptoms. Not so if employed by the method known as that of Von Troeltsch. Of lozenges, I find those of muriate of ammonia much more active in leading to resolution of the venous congestion, than those of red gum, rhatany, etc.

Recent investigations show that the astringent properties of tannin have been exagger-

ated. Where the uvula is relaxed, the snipping of an elongated portion, especially if other functional or constitutional faults are corrected, may lead to a cure; but in a certain proportion of patients in which the promises of the specialist as to the good effects to be gained by the procedure are not realized, the cause of failure will be found in non-recognition of the various vessels. Treatment of these is best effected by the galvano-cautery point, and it is necessary to seal each individual enlarged vessel. For this purpose it may be necessary to make more than one application. Lastly, there is often a hyperæmic tumefaction of the vessels, glandules, and submucous tissues of the pharynx, naso-pharynx, and turbinated bodies; these will also be best treated by galvano-cautery.

In conclusion, I would say that in case it may be objected that the conditions I have described are but representative of an advanced chronic congestion, I do not deny that such occasionally may be the case. In the majority, however, there are no such antecedents; and where the two exist, the practitioner will fail to cure his pharyngitis, or what not, until he has recognized and treated the varix.

And it is in this light that I have ventured to call attention to the subject as one that is not generally recognized, for beyond a short communication at Milan, by my deseased colleague, LLEWELYN THOMAS, I have seen no allusion to it in any books or archives, and no notice is taken of it by the great teachers of Vienna. I therefore make no apology for having occupied your time with considerations that may at first appear trivial, or of exaggerated importance.

DISCUSSION.

DR. CARL SEILER said: I quite agree with the speaker, that the *globus hystericus* is rarely of purely imaginary origin. Some chronic inflammation of the upper part of the upper air-passages usually accompanies this distressing condition. As he truly says, pharyngitis is one of the most common causes of this symptom. At the same time the pharyngitis is to my mind, as a rule, the consequence of remote causes which may be looked for in one of three different directions—in a disturbance of the gastric system, in a disturbance of the respiratory function of the nose and naso-pharynx, and, finally, and most commonly in public speakers, in a faulty use of the organ of voice. This latter condition is frequently met with in those who simply use the voice for ordinary conversation. This constant irritation thus produced leads to hyperæmia and chronic inflammation, which extends upward, rather than downward, into the trachea. In the treatment of the condition described, I think that little can be accomplished by the application of remedies to the apparent seat of the disease, but that the cause must be looked for and removed.

THE TREATMENT OF SEA-SICKNESS.—W. W. SKINNER, M. D., in the British Medical Journal, October 8th, 1887, says: During the course of several long voyages made in 1886 as ship's surgeon, I have investigated sea-sickness, and have devised a method of treatment of this affection at once simple and efficacious.

The nervous symptoms are as follows: Great prostration; indisposition to make the least effort; vertigo; intense frontal or temporal cephalalgia; a sensation of uneasiness, weakness, and discomfort; and insomnia which may extend over several days. All forms of reflex action remain intact. Myosis is often also observed in these cases. The digestive apparatus furnished the most striking and best known phenomena; anorexia, adipsia, paleness and coldness of the lips, ptyalism, nausea, emesis, gastralgia (frequent after three or four days of sickness, and especially constipation. The tongue, liver and spleen are normal in uncomplicated cases The disturbance of the circulatory apparatus, including diminished force of the cardiac pulsation with consequent abnormal depressibility of the pulse, decrease in the number of cardiac contractions (constant decrease in men and in one half of the cases in women; minimum observed, 57, 51, 45 beats; in women there is often increase, maximum observed, 114 without fever; while in children of both sexes there is almost always increase: maximum observed, 120, without fever), the capillary circulation appears diminished, as may be inferred from the coldness of the extremities, lips, ears and nose, and from the extreme paleness of the skin. The muscles composed of unstriped fibres, which receive their nerves from the sympathetic system, are evidently paretic, as is denoted by the inertia of the intestines and by the myosis. The urine, as is well known, is excreted in exceedingly small quantities. It preserves its normal color, precipitates no sediment, is acid, clear, and free from albumen and glucose. Finally, sea-sickness is an apyretic affection, and the period of invasion is exceedingly variable, being from a few seconds to several hours.

For all these varied phenomena there is, I think, a simple explanation to be advanced. Sea-sickness, or naupathia, ought to be regarded as the expression and resultant of certain purely functional or dynamic disorders of the organism, which can all be referred, directly or indirectly, to the sympathetic nervous system. Every symptom named above can be explained by invoking a paralysis, or at least a paresis, of this system, and sea-sickness can be cured by the use of these alkaloids which stimulate the great sympathetic and the unstriped muscular fibres to which it is distributed. The constipation, for instance, may be due to defective action of the great sympathetic upon the muscular coat of the intestine; the myosis to its defective action upon the radiated fibres of the iris; the slowness and weakness of the heart's pulsations to the defective action of the cervical portion upon the intracardiac motor ganglia (BRUCRE and other authors);[1] finally, general paresis of the great sympathetic explains the lowering of the arterial blood-pressure, which is indicated by the oliguria, the abnormal depressibility of the pulse, the coldness of the extremities, the extraordinary pallor of the skin, and the signs of cerebral anæmia. The symptoms of nausea and vomiting, are generally attributed to anæmia of the medulla oblongata, which is due, no doubt, to the general lowering of the arterial tension. More-

1 When there is an increase in the number of pulsations it ought to be attributed to a coexisting paresis of the pneumogastrics (vagi) due to anæmia of the medulla.

over, I have demonstrated by actual manometric experiments upon the lower animals that the alkaloids employed in the new method of treatment, and which cure sea-sickness, really possess the property of raising the blood-pressure.

Excitation of the nerve endings in the abdominal organs, or of the senses of vision and olfaction, or of both, causes by reflex action a suspension of the motor functions of the great sympathetic, which in turn results in the general lowering of the blood-pressure, with all its attendant symptoms.

The medicinal substances employed are atropine, strychnine, and caffeine; the two former are administered simultaneously, the latter alone. Sea-sickness may be cured either by atropine associated with strychnine or by caffeine held in concentrated solution by salicylate or benzoate of sodium. These substances are all administered hypodermically. This mode of administration was chosen for the following reasons: the frequent vomiting in naupathia, by which the agents employed would be lost; the difficulty of their absorption from the stomach in this affection; and also the retaining and destructive action of the liver upon these alkaloids when absorbed from the gastro-intestinal tract (HEGER, SCHIFF, LANTENBACH, and others).

The dose of atropine and strychnine for adults is 1 milligramme of each. It would, perhaps, be better to give a little less of atropine and the double or triple of strychnine. The following, however, is the formula I have employed up to the present time: Atropinæ sulph., strychninæ sulph., ää 0.04 gramme; aq. menthæ, 40 grammes. One gramme of this solution contains 1 milligramme of each of the alkaloid salts. In warm climates the solution must be frequently renewed. Although these substances have been employed a great many times for sea-sickness during the last eighteen months, no injurious effects therefrom has been observed. If after two hours the patient is not cured, a second injection of 1 gramme of the mixture may be given, but it would be imprudent to repeat this dose of atropine too frequently.

Children and adolescents are very susceptible to this medication. A girl aged 2½, sick during fourteen hours, was promptly cured by the injection of one-sixth of a gramme of the solution, that is, by about 0.00016 of a gramme of atropine and as much of strychnine. A boy aged six was cured by one-fourth of a gramme of the mixture.

In the majority of cases of simple naupathia, the patients cease vomiting immediately after receiving a single injection of one gramme of the solution. A little later they feel no more nausea, headache nor vertigo. Almost always they fall asleep shortly after receiving the injection, and remain sleeping for half or three-quarters of an hour. If given late in the evening, the injection ensures a refreshing night's rest.

The following is the formula employed in administering caffeine to adults: Caffeine, 4 grammes; sodii salicyl., 3 grammes; aq. destill., q. s. ad 10 cubic centimetres. Dissolve by gently heating. Each cubic centimetre contains 0.40 of a gramme of caffeine. A single hypodermic injection of 0.30 of a gramme of caffeine completely cured in seven hours a patient who had been suffering intensely from sea-sickness during three days. Another patient was cured in five hours.

Certain disadvantages of the method exist, but are not of great importance. Dryness of the throat is sometimes caused by the atropine, and young children may present an intense redness of the skin; amblyopia caused by this alkaloid is occasionally observed in adults. Exceptionally, the seat of the injection remains somewhat painful, especially in lean individuals, and once in my experience troublesome inflammatory symptoms were caused by an injection under the skin of the outer border of the forearm, which, however, spontaneously subsided in the course of two days.

If this method produces no favorable effect upon a given person affected with naupathia who has not exceeded the age of adult life, it is almost certain that the failure is due to an organic lesion in some part of the circulatory apparatus, especially in the valves of the heart. For example, a patient having well-marked mitral insufficiency, received in the space of six hours three injections, each containing 1 milligramme of atropine and 1 milligramme of strychnine, without the slightest favorable result, the only change in the symptoms being an increase in the number (but not in the force) of the cardiac pulsations. It is well to remark that, if these injections produced no amelioration in this case, they did not, on the other hand, occasion any aggravation.

The two alkaloids exhibited in the form of pills, however, have successfully warded off sea-sickness, when taken immediately upon feeling the first approaches of nausea.

THE CLIMATIC TREATMENT OF PHTHISIS-PULMONALIS.—PROFESSOR CHARTERIS said that inquiries should be fairly weighed before deciding on recommending a climatic change to a patient suffering from phthisis. The most important of these was the history of the case and the length of time required for residence abroad. If the history of the case revealed recent and repeated attacks of hæmoptysis, then there was great risk in ordering a removal to a place where the distance is great and where a sea-voyage of any length is necessary. The sea air is markedly exciting to the system, and if sea-sickness also occurs, there is a great possibility of hæmorrhage recurring in an aggravated form. The next question is the time necessary for climatic treatment. It should be remembered that one or six months is not sufficient to effect a cure, and that coming back to this country, with its variable and humid atmosphere, is always attended with risk. Two or three years must, as a rule, be spent abroad before a return home can be contemplated with any safety. Moreover there can be little doubt that a permanent residence in the country, where health has been regained, is the best means of obviating relapse. In many European resorts it is out of the question to think of earning a livelihood, *e. g.*, Davos Platz, or the Mediterranean. Fortunately in our colonies places may be found of great benefit to the consumptive, where he may recover and live in health, and be busy. He narrated the case of a patient, aged forty-five, a watchmaker, who crossed to America with him, and who nearly died of hæmoptysis on the voyage. He went

on to Colorado, and had been able to start in business there. A young lady, aged nineteen, went to Davos, and remained there a winter. When she returned she was greatly better, but took too much exercise, had a relapse, and died. The great desideratum in consumption was the expansion of the lungs out of doors in pure air. That is just what has been found useful in the ascent at Davos and Malaga, and on board ship. These means practically destroy the far-reaching inference of the bacillus discovery of KOCH. No one doubts that KOCH'S bacilli nestle and multiply on the tubercular bed, but that they originate phthisis, and force the conclusion that tubercles can only come from bacilli, is contrary to the experience and observation of the great majority of the profession. We must believe that phthisis is hereditary, and tends to show itself in the growing maturity of youth, and certain conditions may evoke or originate the disease. We know that some whose means permit of a climatic change, will yet regain health, provided they will discard literary or social pleasures, and spend their lives out of doors. But there are others for whom such prospects can never be. He therefore advocated the formation of convalescent homes where poor consumptives could live in poor air and enjoy the fresh breezes out of towns. In this way their constitution might rally and a cure be effected.

DR. C. D. DRYSDALE, of London, said that in 1,000 deaths occurring in Paris weekly, 200 were from phthisis and 25 were from external tuberculosis. DR. THOUVENIN has shown that 65 per 1,000 among the poor succumbed to the disease. Many years ago the celebrated DR. STOKES had told a friend that in all his experience only two persons had recovered from phthisis, but of late years all who paid attention to the disease had heard of a graat many spontaneous recoveries. He himself had been accustomed to make inquiries at the meetings of the British Medical Association, and he had heard of upwards of a hundred medical men who had recovered from the disease. He held that phthisis was a virulent and inoculable disease and, in all probability, the sputum of a consumptive, if subcutaneously inoculated, would produce the disease in a healthy person, as it did in the lower animals. He did not however adopt KOCH'S view that phthisis was often caused by the inhalation of dried sputum. He rather adhered to the view that the bacillus was an external parasite existing in all parts of the world, and chiefly in damp and sunless abodes, and that delicate persons, with or without any hereditary proclivity, inhaled its germs gradually. He doubted whether phthisis was contagious in any way like syphilis or small-pox, for at Davos, where he was last year, it never seemed to spread to the people in the valley, and persons residing in consumptive hospitals were particularly exempt from the disease. With the exception of some Italian physicians, no one at present seemed to find much use of drugs in the treatment of the disease. They used iodoform as a germicide, and spoke of very good results having been obtained, which he was personally unable to confirm. In the meantime, then, the only chance was hygiene, and climate *par excellence* is the mainstay in consumption. He had noticed that patients got well in all sorts of circumstances; but certainly suitable climates appeared to aid considerably in effecting a cure. His own estimate of the value of altitude in the treatment of consumption, was high since he had seen greater good obtained from residence at Davos, or some other "air-cure" in Switzerland or in North or South America than in any other place, although the shores of the Mediterranean and long sea-voyages in comfortable berths in good ships were extremely curative. When he visited Davos, in 1886, he found that the peasantry in the valleys of equal altitude round about the place said distinctly that people did not die of consumption among them; and, naturally, one could not help thinking that this must be due to the absence of germs in the flora of such elevated spots capable of producing the disease. Patients should go to Davos in May, and stay there until they get well, if they can get well, if they can afford it, with occasional trips home in midsummer, and this would cure many. So would a long sea-voyage, to New Zealand or Tasmania and back by the Cape, returning by Cape Horn at a suitable period of the year in a roomy sailing-vessel. Those who have to make their living by work should be sent to the Cape of Good Hope, to Colorado, or to the Andes of Peru, which are splendid sanitaria, and where they might work at some trade. In this way many persons might escape from the early death which still falls upon such hosts of people in all civilized countries.

DR. SAMUEL WALKER, of Middleboro, said that as DR. DRYSDALE had asked to be furnished with the names of medical men who had seen phthisis arrested, he would give the case of a medical student, I. T——, who, at the age of twenty, was found to have phthisis when studying medicine at Edinburgh. He had a cavity at one apex. He lived nearly two years at Davos, with the result that the cavity healed and he was apparently restored to health, and was alive and well.

DR. GARRETT ANDERSON preferred the climate of the elevated situations of Europe or the continent of America to long sea-voyages, on account of the confined air of the cabins and of the berths.—*From proceedings of British Medical Association.*

A SURGEON'S LIFE.*—I have always held that it is impossible for any man to be a great surgeon if he is destitute, even in an inconsiderable degree of the finer feelings of our nature. I have often lain awake for hours the night before an important operation, and suffered great mental distress for days after it was over, until I was certain that my patient was out of danger. I do not think it is possible for a criminal to feel much worse the night before his execution than a surgeon when he knows that upon his skill and attention must depend the fate of a valuable citizen, husband, father, mother or child. Surgery under such circumstances is a terrible taskmaster, feeding like a vulture upon a man's vitals. It is surprising that any surgeon in large practice should ever attain to a respectable old age, so great are the wear and tear of mind and body.

The world has seen many a sad picture. I will draw one of the surgeon. It is mid-day; the sun is bright and beautiful; all nature is

* From the Autobiography of the late Dr. Gross.

redolent of joy; men and women crowd the street, arrayed in their best, and all, apparently, in peace and happiness within and without. In a large house, almost overhanging this street so full of life and gayety, lies upon a couch an emaciated figure, once one of the sweetest and loveliest of her sex, a confiding and affectionate wife and the adored mother of numerous children, the subject of a frightful disease of one of her limbs, or it may be of her jaw, if not of a still more important part of her body. In an adjoining room is the surgeon, with his assistants, spreading out his instruments and getting things in readiness for the impending operation. He assigns to each his appropriate place. One administers chloroform; another takes charge of the limb; one screws down the tourniquet upon the principal artery, and another holds himself in readiness to follow the knife with his sponge. The flaps are soon formed, the bone severed, the vessels tied, and the huge wound approximated. The woman is pale and ghastly, the pulse hardly perceptible, the skin wet with clammy perspiration, the voice husky, the sight indistinct. Some one whispers into the ear of the busy surgeon: "The patient, I fear, is dying." Restoratives are administered, the pulse gradually rises, and after a few hours of hard work and terrible anxiety reaction occurs. The woman was only faint from the joint influence of the anæsthetic, shock, and loss of blood. An assistant, a kind of sentinal, is placed as a guard over her, with instructions to watch her with the closest care, and to send word the moment the slightest change for the worse is seen.

The surgeon goes about his business, visits other patients on the way, and at length, long after the usual hour, he sits down, worried and exhausted, to his cold and comfortless meal, with a mouth almost as dry and a voice as husky as his patient's. He eats mechanically, exchanges hardly a word with any member of his family, and sullenly retires to his study to prescribe for his patients—never during all this time forgetting the poor mutilated object he left a few hours ago. He is about to lie down to get a moment's repose after the severe toil of the day, when suddenly he hears a loud ring of the bell, and a servant, breathless with excitement, begs his immediate presence at the sick chamber, with the exclamation, "They think Mrs. —— is dying." He hurries to the scene with rapid pace and anxious feeling. The stump is of a crimson color and the patient lies in a profound swoon. An artery has suddenly given away, the exhaustion is extreme, cordials and stimulants are at once brought into requisition, the dressings are removed and the recusant vessel is secured.

The vital current ebbs and flows, reaction is still more tardy than before, and it is not until a late hour of the night that the surgeon, literally worn out in mind and body, retires to his home in search of repose. Does he sleep? He tries, but he cannot close his eyes. His mind is with the patient; he hears every footstep upon the pavement under his window, and is in momentary expectation of the ringing of the night-bell. He is disturbed by the wildest fancies, he sees the most terrific objects, and, as he rises early in the morning to hasten to his patient's chamber, he feels that he has been cheated of the rest of which he stood so much in need. Is this picture overdrawn? I have sat for it a thousand times, and there is not an educated, conscientious surgeon that will not certify to its accurracy.

PHOSPHORUS IN THE TREATMENT OF RACHITIS.—It is now about four years since KASSOWITZ published his first report, noticed in these columns at the time, of cases of rickets treated by the exhibition of phosphorus in small doses in solution in cod-liver oil. This report was of the most encouraging nature, and, allowance being made for the enthusiasm of the writer, was apparently so conclusive of the value of this remedy as to lead many others to give it a trial in their private and hospital practice. The medical journals since that time have been filled with the reports of these experiments, and with the more or less conflicting opinions as to the efficacy of the drug in this disease.

One of the first to adopt this treatment was GUIDI, of Florence, who reported a number of cases in which excellent results were obtained by the employment of phosphorus. After him came SIGEL, BOAS, BETZ, ESCHERICH, HAGENBACH, SOLTMANN, TOEPLITZ, and many others, all of whom were loud in their praises of this mode of treatment. PETERSON, of Kiel, reported upward of two hundred cases of rachitis treated with phosphorus. The cases were followed up for a long time by means of personal observations and correspondence with the parents, and in none of them did he fail to obtain a cure of the malady. CANALI, of Parma, has also treated a number of cases after this plan with almost uniformly good results. The results obtained by these observers were very striking. There was a marked improvement in the general condition of the children; the diarrhœa was in many cases speedily checked, dentition was accelerated, the attacks of laryngismus stridulus became less frequent, and soon ceased entirely, the bones became firm, and the patients were soon enabled to stand erect and walk, where before their weakened limbs had refused to support them.

All the reports, however, are not of this favorable nature. WEISS, MONTI, BAGINSKY, TORDAY, SCHWECHTEN, and others, have reported negative results, and even injurious effects from the employment of phosphorus in rickets. The unfavorable symptoms said to be caused by the administration of this drug are chiefly diarrhœa and digestive troubles. The weight of evidence, however, is thus far strongly on the side of the advocates of phosphorus.

An explanation of the want of uniformity in the results obtained may possibly be found in the difficulty of making a satisfactory and stable solution of the drug. The solution in cod-liver oil, as was first proposed, becomes worthless after it has been kept a certain time. Other menstrua which have been used do not make a perfect solution, so that at one time the patient may be taking absolutely no phosphorus, while at another he receives a dangerously-large dose of the drug, and unpleasant or even alarming symptoms are produced. HASTERLIK has proposed a solution in bisulphide of carbon, which is said to be very stable and reliable. But possibly phosphide of zinc would give equally as good results as phosphorus,

and if so, it would be far preferable, since the dose could be regulated perfectly and all sources of error and danger could be eliminated.—*N. Y. Med. Record.*

Submucous Injections in Chronic Throat and Nasal Diseases.—So much has been written on the methods of treating these diseases, that, were it not for the frequent negative results obtained in a large percentage of cases, I would hesitate to add to the already long list of methods and remedies.

In submucous injections I believe we have a very important means of aiding recovery, especially in naso-pharyngeal catarrh, and follicular pharyngitis.

A curved pointed needle is used for the throat, and will fit most hypodermic syringes. At each sitting I select three or four of the largest groups or tiers of vessels seen in the mucous membrane, chiefly on the posterior wall of the pharynx, and the anterior pillars of the fauces and uvula, and introduce the needle into the main trunk of each cluster, and inject one drop of a solution of equal parts of carbolic acid and glycerin. A whitish appearance is immediately noticed at point of injection; in three or four days the entire cluster will be less distinct, and eventually disappear. This method diminishes the vascular supply, secretion, and hypertrophied condition of the mucous membrane, and leaves it in a paler and more natural condition.

In follicular pharyngitis each hypertrophied follicle is hooked up with the needle, and one drop of the carbolic solution injected. This is followed by a reduction of the hypertrophic conditions without any cicatrix or perceptible change in the membrane. In making the injection, some practice is necessary to lodge the drop in the membrane without its escaping where the needle is withdrawn. To effect this, the puncture must be from above, downwards. Cocaine is rarely necessary.

The straight needle is for submucous injection of nasal hypertrophies, and has given me more effectual and permanent results than other methods.

I have experimented with several acids, but up to the present have had the best results from monochloracetic, saturated solutions.

After spraying the part with Dobell's solution, I apply cotton saturated with an eight per-cent. solution of cocaine, and allow it to remain six minutes. I then charge the syringe, dip the needle in vaseline, and introduce it beneath the mucous membrane, on the free surface of the hypertrophic, and inject one or two drops of the acid, then withdraw the needle and cleanse syringe in an alkaline solution.

The injection is followed in most cases by some pain and hemorrhage of short duration.

Fourteen to twenty-one days is the time required to complete the change in the hypertrophic; a second injection is rarely necessary, excepting in very large growths.

The needle must not be introduced at the base of hypertrophic nor deep into its substance, or it may result in an unnecessary loss of tissue and œdema of the face, which, however, soon disappears. Care should also be taken that the opening in the point of the needle is beneath the membrane, otherwise the acid may be lodged in the throat.

I find that some cases of elongated uvula will atrophy when injected with carbolic acid.—Dr. W. F. Chappell in *Medical Record.*

Prevention of Puerperal Septicæmia.—Dr. Archibald D. McDonald says: "Heterogenetic," or more plainly, inoculated septicæmia, should be unknown. That is the ideal, and I believe it may be realized by the following method, which is an intensified form of that used by a brother practitioner who had some unfortunate experience which led him to appreciate the benefit of using iodine in obstetric practice. Dr. Wynn Williams strongly advocated iodine fumigations, I believe. Well, (1) the nail brush is to be used before leaving for the case; (2) using warm water and soap not previously used, the hands are washed in the patient's room, or room adjoining, as the case may be; then (3) about a drachm of liquor iodi is added to about a pint and a half of warm water, and the hands thoroughly rinsed in the mixture; (4) carbolic oil (1 to 20), or in cases of forceps or turning, preferably fresh benzoated lard is used for lubrication, and the examination of the patient proceeded with.

During the progress of the case until delivery takes place the iodized water is occasionally used, and instruments are thoroughly washed (blades and handles) with it. Of course, in ordinary practice one avoids unnecessary handling of erysipelas, scarlatinal, ulcerating sores (such as scirrhus), and other infectious cases, as well as of dead bodies, or making of post-mortem examinations, or even shaking hands with anyone who has been in attendance on any septic case whatever.

"Autogenetic" septicæmia, I need scarcely say, is rendered less likely by avoiding lesions and remnants of secundines, through not rupturing the membrances too early, giving timely instrumental help when required, and in doing so carrying the forceps handles well forward, somewhat approaching a line parallel to that joining the umbilicus and coccyx, when the body is in the straight position, so as to lessen the danger of perineal laceration; and by careful expression of the placenta, and gentle extraction of the membranes. The same precautions in managing labor of course also help to diminish the chance of septicæmia by inoculation. Should the hands become a little hardened by the iodine, rubbing with vaseline and the use of kid gloves during sleep will remedy that not very important matter. I do not require to occupy space with evidence in support. My cases have included putrid fœtus and emptying uterus of secundines, removing placenta in abortion with vulsella and uterine forceps, adherent placenta, turning, and the various malpresentations, as well as the ordinary cases, extending over a period of six years. There has been only one case of septic pneumonia, and there I was stupid enough to use oil which I was given in the house, for lubricating the forceps. It was one of my early cases. From complications following labor, too, I have been wonderfully free. I commend the practice to be used more widely than it now is.—*British Medical Journal.*

KOLISHER'S TREATMENT FOR TUBERCULOSIS.—Among the many details of this plan of treatment for tuberculous conditions, in parts where it is applicable, we find the following:

In cases where an opening has not yet been established the part is covered with a dressing of sublimate gauze for twenty-four hours, then thoroughly cleansed with soap and water, and finally with sublimate solution 1 to 1,000. The injection is made with a Pravaz's syringe, having a plantinum needle, which has been cleansed with a five-per-cent. solution of carbolic acid. The fluid is gradually injected until it thoroughly distends the tuberculous tissue, giving an elastic feeling on palpation; this is pushed until the tissue is tense, the portions not injected feeling less elastic and being depressed. The needle is inserted to it full length, and its passage into healthy tissue is marked by a sensation of resistance or grating; the tuberculous matter does not bleed as freely as does healthy tissue, and the latter is painful when injected in a greater degree than the diseased parts. The part is at first covered with an antiseptic bandage, which is removed after five or six days, to be followed by a plaster-of-Paris bandage, which is removed as needed. When the stage of reaction and hardening has become fully established, which generally occurs in from three to six weeks, passive motion and massage are employed to restore motion. Contractions and subluxations are treated as they demand. When in a week after injection abscesses form and break, the opening is enlarged and the cavity tamponed with gauze soaked in phoshate solution; over the tampon is placed an antiseptic dressing. These tampons are generally removed once in two days, as a profuse discharge of foul matter ensues. When the cavity has filled with healthy granulations they are treated with nitrate of silver and iodoform, as is usual in surgery. Even in these cases careful after-treatment may secure motion. In cases of necrosis the same treatment is employed. Cold abscesses are laid open, scooped, and tamponed with calcium phosphate gauze, and the edges are often freshened and sutured after Kocher's method, which lessens the scar produced. When tubercular granulations have reached the surface of the body the point of exit is enlarged, the edges freshened, the cavity tamponed with gauze, and the cavity injected with the solution; if the granulations are very torpid, the caustic solutions of calcium phosphate are employed Two cases of well-marked tuberculous fistulæ were treated with good success. Tuberculous skin-ulcers were bandaged with gauze soaked in phosphate solutions, and healed rapidly. The number of tuberculous lymphomata treated was too small to admit of reaching any conclusion.—*Weekly Medical Review.*

HYOSCYAMINE IN DYSPNŒA AND ASTHMA.—In a communication to the Lancet (August 20, 1887), DR. WALKER calls attention to the action of hyoscyamine in asthma, and indeed in the treatment of spasm of involutary muscular fibre, wherever existent—whether in the bronchi or hollow viscera (stomach, bowels, bladder). Given in the dose of half a milligramme ($\frac{1}{130}$ gr.), according to the urgency of the case, every half hour or hour, until the spasm disappears, it is rare for the patient to be unrelieved after two or three doses. In cases of great urgency the first dose may be in the form of a hypodermic injection for quicker absorption. When relief is afforded, it may be given less frequently (two or three times a day), and gradually left off. DR. WALKER has never been disappointed with its action: it relieves the spasm promptly and efficiently, and the patient has no dread of an immediate recurrence of the dyspnœa. A young woman who is subject to occasional attacks of asthma came to him on June 7th, and was quite relieved in twenty-four hours. She did not, however, continue the remedy at longer intervals for some days, as she should have done, and so had a recurrence three weeks later. She was, however, quite cured after four or five days' treatment, and has since remained well. Her previous attacks occured in March, 1887, May, 1886, and December, 1885, when the same treatment was equally, and as quickly, successful; so that the intervals of immunity vary from three to ten months. DR. WALKER usually gives with the hyoscyamine small doses of strychnine (the arseniate or sulphate), in half-milligramme doses, as a tonic, and to counteract the tendency to adynamy. In spasm of the stomach or bowels, in dysentery, in strangulated hernia, and in retention of urine due to spasm of neck of bladder, hyoscyamine in small and frequent doses is invaluable, and will be the first remedy thought of by anyone who once gives it a trial in these affections.

TREATMENT OF CHRONIC ABSCESS BY IRRIGATION.—In his address before the British Medical Association, PROFESSOR HAMILTON described the following method of treatment of chronic abscesses: A long, curved trocar and cannula are pushed through the abscess and made to transfix it four or five inches; a piece of rubber tubing with a single hole about the center is drawn through the cannula by a thread connected with the cutting end of the trocar; the aperture in the tube being lodged midway between the wounds, the cannula is removed. One end of the tube is attached to an irrigating can hung above the patient's bed; the other end leads to a reservoir at the bedside. By means of a stop cock the flow can be regulated as desired, a flow escaping drop by drop being sufficient to keep the contained fluid and the wall of the abscess aseptic. Distension of the sac can also be made when desired by compressing the exit portion of the tube. He considers a solution of chloride of zinc, 1 to 200, the best antiseptic to employ, maintaining that he has obtained the best possible results from this in spite of the assertion of KOCH that chloride of zinc is inert as a germicide. He believes that if it does not kill the germs it renders a surface a barren cultivation field. After about a week the abscess wall has undergone such decided alteration that continuous irrigation is not necessary, but occasional syringing is sufficient for the perfect healing of the cavity.—*N. Y. Medical Journal.*

AXILLARY ADENITIS IN TUBERCULOSIS OF THE LUNG.—DR. SANCHEZ TOLEDO has devoted his inaugural thesis to this subject, which is

absolutely new, PROF. GRANCHER only having called attention to it in his clinic last winter.

The little girl who was the occasion of this study, having had pleurisy, came to the hospital very late in the disease with tuberculosis of the lungs and a large glandular tumor in the right axilla. Enlarged glands could also be found in the subclavicular and submaxillary region of the same side. PROF. GRANCHER compared with this case two others in which co-existence of tuberculosis of the lung and axillary adenitis had been noticed, and showed how it was natural to see a relation of cause and effect between the pulmonary lesions and the glandular. Therefore, said he, pulmonary tuberculosis can infect the axillary glands through the medium of the pleura, or by direct passage through lymphatics which proceed to the axilla after traversing the thoracic wall, or through the medium of the subclavicular glands. It has, moreover, a certain importance in some cases with regard to diagnoses and prognosis. A glandular tumor might call attention to the still latent disease of the lung, the existence of which should deter the surgeon from removing the glandular tumor with the view of preventing general infection. "Henceforth," says MR. GRANCHER, in closing his clinic, "every time a phthisical patient presents himself, do not fail to examine his axilla. Every time that you find an axillary tumor, do not neglect to auscultate the lung."

TREATMENT OF BURNS.—Von Mosetig-Moorhof ("Wiener med. Presse"; "Cent. f. Chir.") complains that hitherto the principles of antisepsis have been for the most part very slightly considered in the treatment of burns. He recommends the use of iodoform, and refers to the analgesic operation of that drug. The patients become more quiet a few minutes after the application, and can, after a quarter of an hour, bear moving with comparative ease. With some precaution, there is no danger of poisoning. He opens the blisters, cleanses the surface carefully with wadding dipped in a half-per-cent. solution of salt, and then covers the burned parts with several layers of iodoform gauze, first sprinkling the very badly injured places with iodoform powder. This he covers with a large piece of gutta-percha tissue, then spreads absorbent cotton over the entire surface, and applies a bandage. This dressing remains as long as cleanliness or fever does not render a change necessary, usually from one to two weeks. In case the dressing is penetrated to a great extent by the discharge, the outer layers of the dressing may alone be changed, leaving the inner untouched. Complete occlusion is impracticable on the face, so here a five-per-cent. ointment of iodoform and vaseline, covered with a mask of gutta-percha tissue, may be applied, and daily renewed.—*N. Y. Medical Journal.*

THE TREATMENT OF ASTHMA.—At a recent meeting of the Berlin Medical Society (Berlin. klin. Woch.; Ctrlbl. f. klin. Med.), LAZARUS read a paper in which, among prophylactic measures, he laid stress on the cure of stenotic affections of the upper air-passages in children, such as enlargement of the tonsils, adenoid vegetations in the pharynx, and chronic nasal catarrh. For the treatment of the disease after it had become established, he recommended the simultaneous use of potassium iodide and chloral, not less than 15 grains of each, once or twice during an attack. He had also used cocaine and the induced current (according to SCHAFFER) with success. For sequelæ, such as emphysema, he recommended the pneumatic cabinet, and for chronic catarrh with profuse secretion, terpine hydrate. In the discussion, PATSCHKOWSKY reported good results from external applications of tincture of iodine, and LUBLINSKI spoke favorably of pyridine, amyl nitrite, sodium nitrite, and nitroglycerin.

TERPINOL IN PILLS AND CAPSULES.—The following formulæ are advised by ROROW in the Therapeutische Monatshefte for August, 1887:

℞ Terpinol.
Ammon. benzoat.,
Ceræ flav.,
Mass pil., āā ʒ 2½.
Mucilag. tragacanth., q. s.
Fiant pil. 100 in num.

Terpinol may be given in capsules as follows:

℞ Terpinol,
Sodii ben., āā gr. 15.
Sacch. alb., q. s.
For ten capsules.
Sig.—One pill or capsule every one or two hours.

THE PHYSIOLOGICAL ACTION OF ULEXINE.—Ulexine, an alkaloid produced by GERRARD from the seeds of the genesta genus (genet épineux), was tested by P. on frogs for its physiological action. Shortly after injection, convulsions ensued, having their origin in the spine. This stage, however, lasts but a short time; after a few minutes a general paralysis develops, the central nervous system first loses its sensibility; somewhat later the peripher nerves, while muscular sensibility remains unchanged. Strychnine conclusions can be hindered, or rather terminated by the simultaneous injection of ulexine.—LANGGAARD in the *Centralblatt f. Med. Wissen*, Oct. 15th.

ABORTIVE TREATMENT OF FURUNCLES.—DR. G. JORISSENE avows (Annal. de la société méd.-chir. de Liège) that he always succeeds in aborting furuncles by inunctions of

Lanolin, 10 grammes.
Red oxide of mercury, 10 centigrammes.
M.

This is to be rubbed in for three or four minutes once a day for small furuncles, and several times a day for larger ones. Whitlow and acne are amendable to the same treatment.—*N. Y. Med. Journal.*

The Medical Age.

Vol. V. DETROIT, NOV. 25, 1887. No. 22.

Original Articles.

A RETRO-PERITONEAL TUMOR.

BY THEODORE A M'GRAW, M. D., DETROIT, MICH.

Tumors which lie behind the peritoneum may arise from various sources, which may be enumerated in the order of their relative frequency, as follows:

1. The kidney and supra-renal capsules.
2. Structures persisting from fœtal life (dermoid cysts).
3. The lacteals, which by obstruction and retention of contents, or by rupture, give rise to mesenteric cysts containing chyle.
4. Lymphatic glands.
5. Pancreas.
6. Post-peritoneal connective and fatty tissues.
7. Vertebræ and ribs.
8. Uterus.
9. Ovaries, which have, through some anomaly of evolution, retained their original post-peritoneal position.

Tumors which belong to the first three of these categories are described in every systematic treatise. Those of the other classes are to be found noticed only in occasional clinical notes in the medical journals.

It was my fortune a short time ago to extirpate a formidable semi-cystic retro-peritoneal tumor which extended from the second lumbar vertebra to the end of the sacrum, and was as large as the uterus in the seventh month of pregnancy.

It seems to me, on account of its rarity and the great difficulty experienced in its diagnosis, to be worthy of record:

Mrs. John Smith aged 53 years came from Forest, Ontario, to consult me on account of a large abdominal tumor, in the early part of June, 1887. She was the mother of six children, of whom the youngest was in her teens. She had first noticed the tumor seven years before, and it had since then grown slowly but constantly until the last six months, when its rate of increase had been rapid.

It was symmetrically located and filled up the whole middle and lower central parts of the abdomen. Its upper border was midway between the navel and ensiform process, and it extended down into the recto-vaginal septum so far that the finger in the rectum and the thumb in the vagina could easily grasp its lower edge. Both loins and the epigastric and hypochondriac regions were tympanitic, but the remaining portions of the abdomen were dull on precussion. The os uteri could just be felt in the vagina above the pubis. The uterus could be plainly felt on the front of the tumor, its fundus being just below the navel. It was not apparently enlarged and seemed to be firmly adherent to the growth. In this, however, I was deceived, as I found on operating that there was no adhesion between the uterus as a whole and the surface of the tumor. It was simply lifted by it and held in position by the tension of its ligaments and the opposing pressure of the tumor and the abdominal wall. The ovaries could not be distinguished either by external or internal palpation. Menstruation had ceased several years before.

The tumor felt rather elastic than fluctuating and was somewhat lobulated.

My diagnosis was that of an intraligamentous ovarian tumor.

The operation was performed with every antiseptic precaution at the Detroit Sanitarium on June 11th, 1887. It became evident as soon as I had opened the abdomen that the tumor was not ovarian, for the uterus and all its appendages rested on the anterior surface of the growth, not even adherent to its surface. I had evidently to deal with a neoplasm which had had for its origin some structure lying behind the posterior parietal peritoneum. An exploring needle thrust into it, passed through a thick wall into a cavity, but the contents, such as they were, were evidently too thick to pass through its groove.

Opening the peritoneal layer covering the tumor, I endeavored to free that membrane from the surface of the tumor, but its wall gave way under pressure, and through the opening made by the finger there poured a great quantity of bloody and grumous fluid. Choosing another spot nearer the uterus I made an incision in the peritoneum and succeeded in stripping that membrane from the anterior surface of the tumor. I was thus enabled to pass my hand around and underneath the growth and to enucleate it from its bed. I then found that it was attached to the neck of the uterus just above the vaginal insertion, by a

pedicle about as large as the middle finger, This was transfixed and tied.

As the immediate result of the operation there was left an immense cavity behind the peritoneum whose floor extended from the second lumbar vertebra to the lower end of the sacrum, and from this cavity there poured a considerable quantity of venous blood. I immediately stuffed this space with a large quantity of iodoform gauze and thus checked all further hemorrhage. After thoroughly cleansing the abdominal cavity, I proceeded to close it and to shut off all communication between it and the retro-peritoneal space in the following manner: The opening in the posterior peritoneum had been made near the point of its reflexion from the posterior surface of the uterus. I dared not remove the gauze from the retro-peritoneal space and sew up the hole in that layer of the peritoneum, lest a fatal hemorrhage might occur on the relief of pressure. Besides that, it could hardly be hoped that so large a hole in the connective tissue would heal without drainage or suppuration. I, therefore, adopted a plan familiar to German surgeons, of sewing the edges of the wound of the posterior peritoneum to the edges of the wound in the anterior peritoneum, and of leaving the wound in the abdominal wall open for drainage. To do this, however, it became necessary to antevert the uterus to such an extent that it was turned practically upside down, the fundus touching the pubes, while the os uteri lay nearly behind the navel. By so doing I finally succeeded in completely closing the abdominal cavity from the outer world, and at the same time in keeping open the way to the post-peritoneal hollow by means of the iodoform gauze, which filled that space and protruded through the abdominal wall.

The wall of the peritoneum which was thus made to extend from the back bone to the abdominal incision just below the navel, separated the cavity of the abdomen into two chambers, a lower one which contained the pelvic viscera and portions of the large intestine, and an upper one which contained the rest of the abdominal viscera.

The patient did well for the first week. I removed the greater part of the iodoform gauze on the fourth day. During the second week she suffered from a high fever, which proved to have been caused by a portion of the gauze which had been left in the sac and had produced irritation. The fever subsided after the removal of the gauze and thorough irrigation and drainage of the cavity. Convalescence was then rapid and she was sent home on the ninth of July.

Examination of the tumor showed it to consist of a large thick-walled sac, whose cavity was lined by irregular projections of granulation tissue. The walls, nearly an inch in thickness, contained innumerable small spindle cells imbedded in fibrous tissue, and here and there were found clusters of large spindle-shaped cells, which resembled in every respect, the elements of unstriped muscular fibre.

There can be little doubt that the tumor originated in uterine tissue. In all probability it started from a pedunculated fibroid which, attached to the uterine neck just above the vaginal insertion, grew downwards and backwards behind the peritoneum, which covered only its anterior surface, and finally became the seat of a sarcomatous growth. While post-peritoneal fibroids are not altogether uncommon, it is nevertheless rare to find them developing into so large a tumor and in just such a location.

If I were called upon to treat such a case again, I should dress the retro-peritoneal cavity after the method of Mikulicz.

It is by no means easy to dislodge great masses of gauze from a deep-seated cavity, after a few days retention. The orifice contracts and the walls of the space close in around the material, and become apparently incorporated with it. To facilitate both the packing and the removal of the gauze, MIKULICZ proceeds in the following manner: A bag of gauze is made sufficiently large to fill the space to be tamponed. To the bottom of this sack on the inside is fastened a cord. The sack is then put into the cavity, and its mouth and cord project through the abdominal wound. It is easy now to fill the sack full with masses of gauze, each of which has its own cord. The gauze absorbs all secretions from the wound, and when it becomes desirable to remove it, the pledgets within the sack are pulled out one by one by means of the separate strings, and finally the sack itself is removed by traction on its cord, which inverts it and turns it inside out.

I was curious to learn the result of the operation as regards the comfort of the patient. I feared lest the extreme anteversion of the uterus might produce vesical tenesmus or other annoying symptoms. Nothing of this kind, however, occurred. I heard from the patient three months after her return home, and learned that her wound had quite healed, and that she was quite well. It is very possible that the weight of the bowels and the natural gravitation of the pelvic organs towards the floor of the pelvis, may finally detach the posterior peritoneum from its new position and permit the various organs to resume their normal relations. However that may be, it is evident that the practice to which I resorted was the only one possible under the circumstances, and that the event proved its efficacy.

CONTAGIOUS ECZEMA.

BY DR. T. LANG, VIENNA, AUSTRIA.

The MEDICAL AGE, of September 26, makes mention on page 428 of an article on contagious eczema, by DR. J. H. WARMUTH, said article having appeared in the Nashville Medical news. I am very sorry that I am not in the possession of the Nashville Medical News, but I assume the essential points of said article are stated in the MEDICAL AGE.

Incidentally, I may be permitted to remark that, in good Latin, the disease should not read "*Eczema papulosa contagiosa*" but *Eczema papulosum contagiosum*. I do not, however, wish to be understood as saying, one must be a good Latin scholar in order to be a good dermatologist.

As DR. WARMUTH asserts, eczema is described in our text-books as a non-contagious skin disease. His two years' experience with this skin disease has, however, convinced him, that the eruption in question is contagious; that it has spread, step by step, from one part of the country to the other, until it extends not only into the Southern, but also into the Eastern States.

The eruption would unquestionably be looked upon as the itch, *par excellence*, by the people of the invaded States. On the prairies it would be called the prairie itch, and in Michigan the Michigan itch; symptoms and termination, however, seem to have been the very same in every instance.

The causes of this contagious skin disease, according to DR. WARMUTH, consist in the negligence of bodily cleanliness and in neglect to change the underwear. By such neglect irritation and congestion of the skin is necessarily produced, and through the itching and the irresistible scratching, the eczematous eruption is created, and in turn the continual uncleanliness favors the propagation of the parasites.

DR. WARMUTH'S theory that the chemical changes which the clear yellowish serum, contained in the vesicles, undergoes, unquestionably favor the origin of the parasites, is somewhat amazing, and his deductions therefrom are somewhat confusing. He clearly confounds the contagion with the popular view of the nature of infection. One is even forced to believe that the author still remains, with his study of medicine, in the last century, and that the investigations of the 19th century have remained to him a *terra incognita*. The convenient belief that parasites are created from the chemical decomposition of organic substances, belongsto the past..

DR. WARMUTH cannot revive this belief in our day—the age of bacilli and cocci.

The assertions of his patients, that they contracted this disease in sleeping with their friends, or in wearing their clothing, demonstrate clearly that the itch and the other parasites of the human body behave exactly the same in both the new and the old worlds. The assertion that, if the microscopists were to examine the object in question, they would be relieved of all doubt, manifests sufficiently that DR. WARMUTH was not only unable to prove his assertion, but also that he was in doubt as regards the correctness of it. It was, therefore, incumbent on him to await the result of the microscopic examinations before declaring the eczema contagious. It cannot be doubted that a microscopist could have demonstrated clearly to DR. WARMUTH the nature of the parasite, which, by the way, might have been the common itch insect, and also might have convinced him that the origin of this, as well as of the other parasites on man, has no relation whatever to the chemical changes of the fluids contained in the eczema papules.

The experiences of DR. WARMUTH, or rather the conclusions which he draws, are, as shown, far from correct, and the old theory, that eczema is a non-contagious disease, still remains firm and true.

I believe that, under these circumstances, I do not assert too much when I say there would have been no loss to the profession had DR. WARMUTH kept his views touching the nature and treatment of the disease to himself. The cases which he reports as having cured could have been relieved just as promptly with lye and baths as with blue mass and sulphate of magnesia. What particular aim he had in using the latter I cannot see. Did he believe that he might with them arrest "the chemical changes of the fluids, contained in the vesicles," and thus arrest the formation of the parasites? Or is he, what seems to be true, a disciple of that school which looks upon the *acrimonia sanguinis* as the source of all skin affections? And did he intend that the magnesia sulphatis taken on an empty stomach should mitigate them or remove them entirely from the bowels? I dislike to criticise therapeutics, for here we have no absolute rules; but I do affirm that it is improbable that the sulphate of magnesia, taken internally, will have any effect on the parasites of the human skin, or on any other symptoms of which they are the cause.

The prescriptions of plumbi acet. with carbolic acid and fluid extract of belladonna, also demonstrate that DR. WARMUTH'S knowledge of chemistry belongs to the past ages, when in order to please the theorist in therapeutics, medicines were compounded which were non-compatible, chemically.

I only desire to show the very deplorable fact that assertions are made in medicine (more than in any other science) which are void of any and all proofs. I have said once before, in my pamphlet entitled, "Theory of Neuroses of

the Stomach," Vienna, 1885, that "Whoever asserts something, has also to prove it," and in medicine this must always be the first principle.

ADDRESS ON OBSTETRICS BEFORE THE CANADIAN MEDICAL ASSOCIATION.

BY F. R. ECCLES, M. D., LONDON, ONT.

Animated by a desire to promote the interest of this Association, and feeling the obligation which rested on me as a member thereof, I consented to open the discussion in the department of obstetrics and gynæcology. Soon thereafter I recognized the responsible position in which I had placed myself, and began to sorely repent my rashness. But the consciousness of the liberal-mindedness of the Canadian Medical Association assured me that in an honest endeavor to discharge a self-imposed duty, I need not look in vain for their kind indulgence.

I was anxious to present to this Association some subject in connection with this department which would not only be interesting to the specialist, but to the general practitioner as well, as the general practitioner largely prevails in this young country of ours. I have therefore selected so commonplace a subject as *Subinvolution of the Uterus*, not more on account of the frequency of its recurrence and the not unfrequently more or less unsatisfactory results of treatment, than the personal desire to obtain the views as well as the experience of a great number of those present. And even if the observations, clinical research and line of treatment of so many here, who are more competent to speak upon this subject than I am, shall not bring out any great advance, I shall nevertheless not regret the introduction of the discussion. If no new remedies are brought forth, no specially different lines of treatment advocated, still if we catch the inspiration to the proper use of remedies well known, I venture to say that the time is not misspent. Because of the prevalence of this affection, so much the more has it engaged the mind of the general practitioner, and in many instances is looked upon as the opprobrium of our art. "Sir, thou hast nothing to draw with, and the well is deep." I use the term "subinvolution" in preference to any other name, such as areolar hyperplasia, chronic metritis, etc., for two reasons: It conveys in its meaning a fact that there has been an arrest or retardation of all those normal and physiological changes which are embraced under the head of involution, and secondly, one is free from those mists and obscurities, those suppositions and hypotheses, where an honest endeavor to give a name according to the pathological condition of the parts obtains. For one hears of areolar hyperplasia, chronic metritis, hypertrophy of the uterus, sclerosis of the uterus, chronic parenchymatous inflammation, or chronic corporeal parenchymatous inflammation, diffuse proliferation of connective tissue, diffuse interstitial metritis, etc., etc., all of which indicate to the thoughtful student that further elucidation of the nature of the pathological changes of this condition may yet be expected.

As eczema in its early stages differs from eczema in its later stages, and as the pathological conditions of hepatic cirrhosis in its early stages differ materially from those noticed in the later stages, so we often find the subinvolved condition of the uterus frequently presenting variations consequent upon the duration of the ailment, although I believe this is not invariably so. For this reason, more than from natural conservative tendencies, I would retain the old familiar term "subinvolution."

We understand by this that there has been a failure to undergo sufficient reduction in size after delivery or abortion. I infer that something has prevented the ordinary changes incident to the retrograde metamorphosis from taking place, which in the short space of six or seven weeks reduce a uterus of 24 ounces to two ounces. Nature intends a proper and rapid reduction of this organ. How, then, is it that we have this ailment occurring so frequently? That there are known or unknown causes—avoidable or unavoidable—which prevent involution, will not be denied. The art and science of medicine are not only to relieve symptoms and remove morbid conditions, but to worthily stretch out into other and more philanthropic fields; and now in all civilized countries preventive medicine is occupying a prominent place.

After delivery, gradual diminution of blood-supply and an increasing activity of the processes of absorption bring about involution of the uterus. But amidst unfavorable circumstances, the ordinary retrograde metamorphosis undergoes some departure from health.

I shall endeavor to present to you some of those unfavorable circumstances or influences, the prevention of which will largely contribute towards the normal involution of the uterus. And first amongst those unfavorable influences is fever. An elevated temperature, whether it be from specific fever or septic causes, or inflammatory changes, interferes with general nutrition, and to a marked extent is this the case with the uterus following parturition. Recall to your minds some of the peculiarities of the muscular tissue, of which the uterus forms a good example. Arrest of the function is followed by little or no atrophy, whereas exaggerated action leads to hypertrophy to a marked extent. Irritation of the nerves supplying these muscles has less influence on the contraction of their fibres than

direct excitation of the muscles themselves, and regeneration of their fibres takes place rapidly, in marked contra-distinction to the voluntary muscles, the structure of which is not easily restored. In reference to the uterus itself, there is no organ in the body which so readily responds to irritation. The presence of a myoma deranges its vascular supply and leads to hypertrophy. So will a contracted os or a flexed cervix, because resistance is offered to the passage of the blighted elements of the lesser reproductive process. Pregnancy so stimulates the nutritive activities, that an organ of 12 or 14 drachms increases to twice as many ounces during the short period of a full utero-gestation, while the inverse process is accomplished in the marvelously short period of six or eight weeks. Our attention should therefore be directed to the uterus in all cases where fever has occurred during the puerperium; very frequently we will find arrested involution. Then inflammatory attacks occurring in the body or neck, or in immediate connection with the uterus, as in pelvic peritonitis or cellulitis, may be looked upon as unfavorably influencing retrogression; these are the cases in which one may expect to find subinvolution present.

A lacerated cervix or a lacerated perineum, or any serious injury to the vagina, is moreover known to arrest involution, not only of the uterus, but of the vagina often.

Then there are cases of general debility—impoverished blood—an enfeebled and disordered state of the nervous system, where the nutritive processes are below par; where there is muscular atony, and consequently but feeble rhythmical contraction of the uterus. In all these cases, one almost invariably finds involution retarded. And these are the very cases where the mother is considered unable to nurse her child; and consequently the stimulus to reflex action, which is an important factor in the production of uterine contraction, is lost—a not unimportant point to remember in all cases of abortion. The retention of any portion of the secundines, displacements, prolapsus and flexion keep up a state of hyperemia which interferes with involution. My experience, however, leads me to believe that displacements are more frequently the effect than the cause of the ailment. The weighty uterus is not so easily steadied, and hence topples over, and generally in the backward direction, perhaps being first influenced in that direction by a distended bladder. Other unfavorable circumstances influencing involution are post-partum hemorrhage, neglect to empty the rectum once in 24 hours, a too early resumption of the upright position, or any local cause whatever productive of venous obstruction. With the knowledge of all these circumstances the physician stands as sentry on guard, and who can say in how many instances disease has been averted, and the physiological changes incident to involution have gone on without let or hindrance. The prevailing idea amongst the laity that the patient should be up and about on the ninth day, is productive of no little harm. At times it requires considerable firmness on the part of the physician to break down these old-time prejudices. I look upon too early getting up of etiological importance in connection with subinvolution.

There are certain accidents which frequently occur in connection with the subinvolution. For instance, a subinvoluted uterus is liable to prolapsus—liable to displacement. Indeed, I very frequently find, with subinvolution, retroversion or retroflexion, or both, with the ovaries dragged down, enlarged and tender; and in not a few instances I have been enabled to detect a varicose condition of the veins of the ovary. In the majority of cases, these are the results of subinvolution—conditions which, although relieved, are liable to return after subsequent pregnancies. Hypertrophy and elongation of the cervix are often present.

As far as symptoms are concerned, I think it almost impossible to determine that subinvolution exists. Indeed there are no pathognomonic symptoms, and there are many symptoms in common with other uterine diseases. If there is one symptom to which I attribute more importance than another, and one which more frequently occurs, it is the sense of pressure on the top of the head, just about the position of the anterior fontanelle. Some patients speak of a burning pain there, others as if they wanted to press their head against something, while others will tell you of a sensation there so unbearably distressing that they believe they will go crazy. This is a symptom I have noticed as being not unfrequently present. I do not remember this as a symptom denoted by any author, but it is one I have recognized for the last fifteen or sixteen years. Oftentimes the patient consults you only on account of the headache, and will tell you that it is not at all like the headache from stomach derangement, neither is it like neuralgia, but incomparably more unbearable than either. Then in old-standing cases, where the headache of this character has been more or less persistent, there comes in the current of the history fits of melancholy, and, indeed, the patient will volunteer the statement that her ususal jollity has given place to irritability, by which she really means mental depression. Close observation will often detect an anxious countenance Catching this anxious and frequently sallow countenance, I often feel pretty certain of my diagnosis before the patient is rightly seated in my consulting-room. With many of these poor women how wearily the day passes, and without a ray of sunshine to brighten their

path! To make better their body—to cure them of their ailments is really to regenerate them—is to change a saddened countenance into one expressive of gratitude beyond any pecuniary consideration.

Now a great deal has been written about mental depression and tendencies to insanity in cases of laceration of the cervix of long standing, but I have frequently seen the same symptoms in subinvolution, unaccompanied by any laceration. When you cure the subinvolution, whether it be accompanied or unaccompanied by a lacerated cervix, you cure the melancholy and headache as well, and in general all the other symptoms. But some of these cases cannot be cured with any medicinal agent, either by internal administration or local application, but by some operative procedure, of which I will have occasion to speak. Recent subinvolution will always be characterized by more or less menorrhagia, and in not a few instances in those also of long standing. The inference from a clinical standpoint is that the condition of the uterus in those latter cases always remains much the same. One who has at all carefully observed his cases of subinvolution will have noticed some of long standing, which, aside from the history, would appear to have been cases of only recent date, cases in which the uterus, body and neck, still remains soft and large, while others present the sclerosed condition, in which the menstrual discharge becomes scanty. Upon examination, we often find a patulous os and open canal, with considerable enlargement of the uterus. The enlargement is evenly distributed and is readily made out by the bimanual method and confirmed by the sound, which may pass from three to five inches. Excluding pregnancy and abnormal growth, the enlargement in conjunction with the history will seldom fail to establish the diagnosis. There is in general an increased sensitiveness about the uterus, more noticeable when you endeavor to raise the uterus up than when you press upon it from above; and more especially is this the case if the uterus be retroverted or retroflexed. In all such cases dyspareunia is a prominent symptom; unrest and an aggravation of symptoms follow cohabitation. I am always suspicious of retarded or arrested involution, where the history of illness dates from labor (either at full term or premature), where it is accompanied by menorrhagia, and especially if menorrhagia occur during lactation. Whatever may be the direct cause, I suspect involution. Then I confirm my suspicions by a diagnosis made negatively; that is, as far as possible, by eliminating the possibilities. Careful physical examination, with the information already obtained, will in general clear up all doubts about the case. In a few cases we find that the menstrual flow, from its first re-appearance, is scarcely beyond the normal, and yet there is marked subinvolution. It will generally be observed in these patients that lactation exercised a sufficient influence to prevent menstruation until some nine or ten months after the birth of the child. I have a patient under my care now (who recommenced menstruation when her child was nine months old, and who continued to nurse the child for five months longer), in whom menstruation has been normal since its first re-appearance, now some fifteen months ago, and yet her uterus is large and heavy, measuring quite 3½ inches. In the great majority of cases it is not so, and in recent cases of subinvolution more or less menorrhagia may be looked for.

The treatment of subinvolution differs materially according to the conditions present. When one finds the uterus enlarged, soft and relaxed, feeling very much like the uterus in the second month of pregnancy, it is noticed that this condition responds very readily and promptly to the treatment. The chlorate and bromide of potassium, with ergot and quinine, are amongst the most useful remedies. Two grains each of ergotine and quinine, given three times a day, with 25 or 30 grains of bromide of potassium at bed-time, will in general promote involution. It will be materially aided by douching the cervix with a gallon of hot water night and morning, to the last pint of which I generally add one drachm of borax or alum. If the recovery is not prompt and the cervix looks congested, I scarify it, make applications of iodized phenol or Churchill's tincture of iodine to the endometrium at intervals of ten or twelve days, painting the whole vaginal cervix at the same time. I do this whether endometritis be present or not, and I am satisfied involution is promoted thereby.

It is unnecessary for me here to mention that any displacement should be rectified as soon as possible, as I have before intimated that this accident superimposes an additional element of venous congestion. But when the condition of the uterus becomes altered, and we recognize hardness of tissue, we find a more obstinate resistance to treatment. These are the cases which have run on for months, and even years, with little or no treatment, beyond tonics and laxatives; and these are the cases in which we find extraordinary nervous symptoms developing themselves. Unfortunately a number of these cases will never fully recover, but their condition may often be so ameliorated that they may pass the years to the menopause with comparative comfort. In addition to the line of treatment which has just been advocated, and which must be carried out very vigorously, I am in the habit of applying nitric acid to the whole endometrium, after the manner of ATTHILL, when the carbolic acid, iodized phenol or tincture of iodine fails to produce a healthy con-

dition of the mucous membrane. The application of the various caustics has a two-fold purpose—*to establish* a healthy condition of the mucous membrane, and *to whip* the uterus into contraction. Undiluted carbolic acid is a very safe and almost painless caustic, if care is exercised in not allowing any to trickle down into the vagina. If after a satisfactory trial of this treatment no very marked benefit be produced, I have tried dilatation of the whole cervical canal to the extent of an inch or more, endeavoring in this manner to produce a strong impression upon the uterus. In one case in particular I believe I obtained much good. As this is an operation not fraught with much danger, it can readily be tried in obstinate cases. But I can recommend with much more hope of success, removal of a portion of the cervix. In a number of my early trachelorrhaphies, I was surprised to find what a marked impression was made on the nutritive activities of the subinvolved organ. In one of my first this was especially noted. The uterus was large, retroverted, somewhat prolapsed, and the cervix lacerated into three sections, and the symptoms of backache and dragging pain were so unbearable that the poor woman had been an almost helpless invalid for three years, with all the nervous symptoms which accompany such a condition. In addition, there was a laceration of the perineum almost back to the rectum. In this case I was associated with DR. EDWARDS, of London, and operated April 2d, 1881. The uterus rapidly diminished in size, and the woman bloomed into health in a manner wholly surprising to her friends and medical attendants. In a short time after her return home, she attended to all her household duties connected with a farm, and in a letter to me some ten or twelve weeks afterwards, refused to come back to have the perineum repaired, saying, "as long as I feel as well as I do now I will not have the other operation done." Diminution in tenderness was as marked as diminution in size. As I mentioned, the cervix was lacerated into three segments, one small and two large. The small segment was entirely cut away and the operation thus converted into a bilateral one. I was strongly impressed, aside from the mere stitching up and healing of the cervix, that the operation should have produced such an impression upon the uterus as to start up afresh the nutritive activities which had been arrested some four years previously, and thus involution was brought about.

Another case of subinvolution without any laceration of the cervix, in which I was associated with DR. FRAZER, of London, in which the uterus was so large and the menorrhagia so profuse, that some considerable doubt was expressed as to whether there might not be a fibro-myoma in the walls of the uterus. The patient was much exhausted from repeated periodic hemorrhages and was incapacitated for work. She had the best of treatment, both constitutionally and locally, but with only temporary benefit. I saw her on Oct. 16, 1884 (uterus then 4½ inches), when we agreed that removal of the cervix would afford the best chance of recovery; might wake up the uterus, as it were, and accordingly on November 8th I removed it with the écraseur and scissors, using the PAQUELIN cautery to restrain the hemorrhage. It was completely healed in four weeks, and the improvement in the general condition was uninterrupted. The menses became regular both as regards time and quantity, and has remained so up to the present time. I asked DR. FRASER to examine the uterus, which he very kindly did on the 29th inst., and his report is that the body of the uterus is normal in size (measurement 1¾ inches), menstruation normal, and her general health good. It will be remembered that she had a long course of treatment, of applications of caustic to the uterus, ergot, quinine, strychnia, etc., and with little or no benefit. No treatment except tonics after the removal of the cervix, and the improvement commenced at once.

Every one who has had any experience in gynecology can bear witness to the evident improvement of the subinvoluted condition of the uterus after what has been called EMMET'S operation, now known as trachelorraphy. DR. EMMET himself says: "For many years past I have met with few or no cases of subinvolution which were not due to laceration of the cervix." And again he says: "If the operation be performed after the different sources of irritation have been removed, the uterus will be reduced rapidly in size, and the patient will not only regain her health, but will remain in the full enjoyment of it afterwards." One hesitates in differing from so good and excellent a man as DR. EMMET—such a careful observer, and one in whom wonderful results have been the outcome of *such careful observation.* But I do not believe that *complete recovery* will occur in every case, at least such has not been my experience; but that in the great majority of cases similar results *will follow*—the involution will take a fresh start and become completed. But that there are cases of subinvolution in which there has been no laceration of the cervix, and in which the improvement has not been satisfactory under the usual treatment, I question if any one here will deny.

Just as in some cases of enlargement of the tonsils in children—you improve the general health, pay careful attention to the functions of the skin, kidneys and bowels, endeavor to correct faulty nutrition, apply topical applications to the tonsil, use frequent compression of the

gland between the fingers, and still the gland diminishes very little in size. But while the health is in the best possible condition, if you remove a small portion of the most prominent part of the tonsil with the tonsillitome, it appears to start up a new condition whereby absorption takes place and the enlarged tonsil gradually melts down. In a similar manner, with my limited experience, a removal of a portion of the cervix in obstinate cases of subinvolution produces like results. The operation surprises the uterus; increased nutritive activities result, and involution is set up.

When I was in Europe in 1876, '77 and '78, it was quite the fashion in some hospitals to cauterize the cervix deeply with caustic potash in enlargement of the cervix with subinvolution, but the subsequent contractions in the cicatricial tissue have, I believe, justly made the operation unpopular. It was the impression made on the uterus by the powerful effect of the escharotic that produced a revulsive action on that organ.

In some cases wedge-shaped sections have been taken from the cervix with good results, not only to the enlarged cervix, but also to the uterus itself, and, as I said, in a few cases I have had fairly good results from dilatation. In that very excellent work of the late DR. JOHN THORNBURN, of Manchester, whose untimely death took place while his work was going through the press, he quotes from his colleague in reference to the operation on the lacerated cervix, and says that "the operation must often be looked upon as merely a step in the course of treatment of a uterine disease," a statement with which I am fully in accord. Any operation on the cervix for the promotion of involution must only be looked upon as a means to an end. It is all-important, therefore, that the system should be put into the best possible condition. Local and constitutional treatment must join hands, otherwise we will be frequently disappointed. In defective nutrition the uterus suffers in common with other organs, and this alone greatly predisposes to arrest of involution.

Correspondence.

NEWSPAPER ADVERTISING.

DR. HUNTINGTON, in the last issue of the AGE, asks a question touching the propriety of physicians advertising, to which those who acknowledge obedience to the Code of Ethics can have but one answer. Unquestionably it is unethical for a physician to make use of the means adopted by the tradesman to advertise his skill. The practice of medicine is not a trade, and the methods of the trade do not fit it. It is a profession, and those who are engaged therein are supposed to be gentlemen, and possessing that delicate sense of propriety, to say nothing of modesty and regard for the feelings of their local brother practitioners, which can always be relied upon to keep them from vaunting their own great skill. The physician who claims superior skill and seeks to parade it before the world is, moreover, in nine cases out of ten, dishonest. While there are, doubtless, geniuses in our profession—men who have a peculiar aptitude for their calling and a deeper penetration into the mysteries of nature than the generality—there are remarkably few who, after an experience of a decade or two, will dare to assert in the privacy of their own hearts, that they possess any points of great superiority over their brethren. As a rule, the physician who claims superior ability is either too ignorant to detect his own defects, or too dishonest to acknowledge them.

As to the wisdom of advertising, from a pecuniary point of view, I do not believe that it pays. The one who resorts to the direct or indirect puffing of his skill through either the advertising or local columns of the newspaper, may gain a little temporary notoriety, but it is only temporary at best. He may succeed in getting people to talk about him, but if the stuff isn't in him (and it is usually wanting in those of his kind) his notoriety will profit him but little. Notoriety is not fame, and it never did a man any permanent good. It is the man who does his duty conscientiously, as that duty presents itself, who eventually "gets there," and no extraneous influence can compensate for any dereliction in the line of duty. I have been young, but now am old, but I have never yet seen the honest, competent, attentive, conscientious physician, who was content to let his deeds speak for themselves, suffer from lack of the necessary patronage to provide for him the necessaries and even the luxuries of life. DR. HUNTINGTON is, I should imagine, a young man. When he has traveled along a little further on his journey the tricks of the brother to whom he refers, will cease to excite other feelings within him than those of commiseration.

SENEX.

USTILAGO MAIDIS.

I have used Ustilago maidis in my obstetric practice for several years past, and have come to regard it as an indispensable article. The contractions produced by it are distinctly intermittent; consequently I do not hesitate to use it where the conditions are such as to forbid the administration of ergot of rye.

In a case treated a short time ago where there was marked inertia of the uterus; as fully dilated; head at the superior strait, I commenced giving Ustilago maidis and for some time obtained the desired effect, but

when the head had advanced so far as to begin to press upon the perineum the stomach refused to tolerate the medicine longer. The pains almost ceased and I was obliged to terminate the labor with forceps.

Under such circumstances what would have been the result of using it hypodermically?

I was tempted to try it but feared lest there might be enough insoluble material to produce troublesome abscesses.

GEO. M. HAINES, M. D.

[We should not advise the hypodermic exhibition of Ustilago maidis, as suggested, in the form of the fluid extract at least. This preparation is not adapted to this method. The liquor ergotæ purificatus (normal liquid ergot) may be given hypodermically without danger of serious local irritation.—ED. AGE.]

A correspondent of the Atlanta Medical and Surgical Journal relating the confessions made to him by a lady, pregnant and unmarried, of her attempts to bring about an abortion, says that she used two pounds of chloroform in forty eight hours, six ounces of ergot in as many hours; besides quantities of balsam-apple, gossypium, turpentine, hot water injections; purged and starved herself for weeks, and resorted to many of the most violent methods to procure her end, such as jumping or letting herself fall from the verandah, beating her abdomen with a rolling-pin until it was tender; rolled a barrel of unslacked lime up and down the abdomen; leaned over with her full weight upon the piazza railing time and again, swinging to and fro like a sack; running full force against a woodpile—. At this point the doctor, horrified, stopped her and said it was enough.

Because the Medical Times, a homœopathic journal, of New York, maintains that the law of similia is not without exceptions, and that high attenuations are ridiculous, the American Institute of Homœopathy, at its late meeting, passed a resolution striking it from the list of homœopathic journals. This, it strikes us, was eminently proper, and if homœopathic societies will follow up the good work by passing similar resolutions touching the so-called homœopaths whose practice conforms to the views for which the Medical Times was ostracized, they will do a good work both for homœopathy and for scientific medicine. The practitioner who sails under the homœopathic flag should be true to the principles which it represents. This does not, however, prevent the scientific practitioner for prescribing according to any law which he may elect, in a given case.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., NOV. 25, 1887.

Editorial.

WHAT'S IN A KISS?

The old song answers "joy and bliss; only this, and nothing more." The osculatory act has been a theme for the poet from the very beginning, and the changes have been rung on its glories without ever a suspicion of fatiguing the reader. There is something in its very nature which fits humanity, and it is capable of modifications adapted to all the variations of human passion. It is one of the things exceedingly simple in itself and perfectly understood by all sorts and conditions of men—and women, but which, nevertherless, beggars description. It is capable of shadings which words cannot limn, and runs the gamut of passion from the most sordid lust to the most divine love. It is an incorporeal something which past ages have not sought to scrutinize too closely, perhaps fearing that too great a familiarity with its mechanism might beget for it contempt. It has remained for this practical age to essay an exploration neath the surface, and we have before us an extract from the Journal de Medecine de Paris, in which the act is viewed purely as anatomical, or, perhaps, rather as a physiological procedure. We are told herein that it consists in the application of the lips to the human face or other portions of the anatomy. It is, however, not exclusively a human act, for the dog, the cat, the horse, the dove, and almost all birds, including the sparrow, kiss, each in its own peculiar way. It is, says our contemporary (who is, evidently, not entirely lost to the sense of the poetical), to the sense of touch what music is to the sense of hearing, that is to say, the most delicious impression which our sensitive nerves can receive.

He who kisses, we are told, puts in activity all the sensitive nerves of the lips, that is to say, in the body of the epidermis, where the most delicate and exquisitely impressionable nerves reside. The excitation of these sensitive nerves does not depend solely upon the simple contact, for it is likewise due to the temperature, and several agents are involved in the act of kissing.

In order to receive the greatest impression, the largest number of nervous filaments must be titillated; thus the more the lips are spread, the greater number of centres are exposed. Hence, without doubt, the general opinion that large lips are the sign of a voluptuous temperament is correct; and the expression, "kiss with the end of the lips," designates an insignificant and wholly heartless kiss—a merely formal kiss.

In order to act on the nerves by pressure, the lips must be pressed into each other's tissues, adapted in such a manner as to prevent the entrance of air. At the same time a regular aspiration of air is made through the nostrils, so as to leave the united lips in the condition of a vacuum: thus a natural congestion follows at the point of contact, inducing a heavenly sensation at the exterior of the lips. Poets will pardon the opinion that the true kiss has all the suction power of the leech.

As before stated, temperature likewise influences the powers of the kissing impression. Cold diminishes the sensation and retards the transmission of the act to the brain; heat, on the contrary, augments the transmission, and acts more agreeably on the tactile sense.

So the lips, notwithstanding their exposure to the air, always have a very elevated and constant temperature, without having, except in fever, that dry and burning heat which is, perhaps, even more unpleasant than cold.

Those who kiss not only instinctively seek to produce a great number of peripheral impressions, but at the same time, and perhaps also instinctively, they embrace one's most sensitive parts.

Look at the physiology of the act. The most sensitive parts of the body in the descending order of the kissable act, are the point of the tongue, the eyelids, the lips, the cheek, the neck. Without pushing the comparison further, it is but necessary to avow that science cannot explain everything; for it may be said that a kiss upon the neck or upon the head produces a more agreeable sensation than a kiss upon the cheek.

The kiss offers us the best example of the influences of the physical upon the moral, and reciprocally of the moral upon the physical.

The kiss rapidly modifies our desires and our ideas; in a word, the majority of our intellectual acts act in this connection as all other peripheral impressions. The concussion of the kiss determines at the peripheries of the nerves its propagation along their entire tract, causing activity in all those cerebral cells with which they are in communication.

This is not, as many believe, a simple propagation of movement; it is, on the contrary, a series of activities on the part of the nervous elements. The impression does not conserve its primitive value, but is enlarged, increased in the manner of an avalanche, that is to say, it is augmented to the same degree that it is propagated.

In order to designate this method of movement, we believe that the best term to use is that of *nervous vibration*, because that it excites no prejudice, and only indicates that the motion is only a form of molecular movement.

CHEERFULNESS IN THE SICK-ROOM.

It was irreverently said by the noted contemporary atheist, that if he had had the fixing of the law of man's being he would have made good health, instead of disease, contagious, and the remark has been applauded by some of the gentleman's sympathizers, as an instance of his profound wit. The thinking man, however, will fail to find in it any revelation of peculiar wisdom and chiefly because of the fact that it implies a calumny on nature. The contagion of disease is spread through ignorance or wilful violation of the laws which govern it, and it is not true that the person in good health is without a peculiar influence on those who are not. The bacillus which emanates from him who is of full health and buoyant spirits has, it is true, not yet been isolated so that it can be developed or attenuated to inoculable strength, but that the virtue goes out of him to cheer the desponding heart, to remove from the field of vision the bluish tinge, and to communicate to the suppositious gizzard the necessary supply of sand, no competent observer will for a moment doubt. Our instruments of precision have discovered the grosser contagion of disease, but the ethereal influence which emanates from the healthy yet eludes our ken

We often hear it implied of certain physicians that their presence does more good than their pills, and, indeed, the further along we get on the road the more we become convinced that the practitioner's individuality and deportment modifies in some, as yet inexplicable manner, the action of his prescription. There are several qualities which are excellent excipients for the exhibition of drugs, but we shall refer at this time only to the chief, to wit, cheerfulness. It is a something without which the physician is sorely handicapped in his conflict with disease, and the patient to whom it is not imparted by his medical counsellor will in the higher evolution of the laws, have just grounds on which to base a suit for malpractice. The physician who has it not in his soul, should cast about for another calling. The higher mathematics would offer a fitting field for his energies. We pity from our inmost sense of pity, the poor patient who is being ministered to by the practitioner who emits acidity and who sees before him only an object to be in-

fluenced by drugs. The unfortunate is truly to be commiserated.

There is a great difference between cheerfulness and levity, or mirth, and it is a matter of much practical moment that they be not confounded. Mirth is an act, and may be performed by one not in a cheerful mood; cheerfulness is an essence and can emanate only from a mind in which it is inherent. Mirth has been likened to a flash of lightning which breaks through a gloom of cloud, and glitters but for a moment, and cheerfulness to a steady daylight in the mind which fills it with a steady and perpetual serenity. Cheerfulness is of a serious and composed nature, and does not throw the mind into a condition improper for the present state of humanity. It is very conspicuous in the character of those who are looked upon as philosophers. A cheerful mind is not only disposed to be affable and obliging, but raises the same good humor in those who come under its influence. A man finds himself pleased, he does not know why, with the cheerfulness of his companion. It is different with mirth; the mind to be moved by it must first be in the mood to be pleased. Its influence on a mind not properly attuned to it, is repellant. The cheerful physician on entering a sick room enters into sympathy with the sufferer and insensibly draws him from himself, awakening a secret delight which tends greatly to soothe the discordant action even of the body. Cheerfulness is never out of of place in our dealings with the sick, but mirth is very apt to be distasteful.

To be cheerful in the proper sense of the word, presupposes a proper equipoise of the passions, and in the case of the physician, it behooves him, if he would do the most possible good to his patient, to keep his mind free from all carking cares, to avoid all practices or excesses which are in themselves calculated to leave behind a sting. Unfortunately in the struggle for existence there is much to distract the mind, especially of the young physician, and to interfere with that serenity from which cheerfulness insensibly flows. The ideal physician must be perfectly happy, contented with his lot and undisturbed by either temporal or spiritual cares. Such a one spreads a perpetual diffusion of joy.

THE PREVENTION OF PUERPERAL FEVER.

The reaction against the use of corrosive sublimate injections as a prophylactic of puerperal fever, has strongly set in, and this powerful microbicide, which for a time was regarded as the certain savior of the parturient woman against the dangers of septicæmia, has already fallen into innocuous desuetude, in the hands of the wide-awake portion of the profession. While it is unquestionably destructive to the morbific germ which causes the mischief in the woman, there has been no means discovered whereby its action can be limited to this germ, and it is quite as apt to either destroy, or cause serious trouble in the patient.

In a paper read before the section on obstetrics at the late International Medical Congress, Dr. T. Moore Madden, of Dublin, submitted a plan of treatment, including microbicides, which in his hands accomplishes the end aimed at in the use of corrosive sublimate, without danger to the woman. He recommended the following :

1. The most scrupulous attention to puerperal hygiene.

2. The preparatory treatment of the patient —suitable nourishment, fresh air, and appropriate tonics—of primary importance.

The author ordered a mixture of potassium chlorate, iron and quinine, to be taken during the last couple of months of gestation, and he has never seen puerperal septicæmia in a patient who had been thus treated before her confinement.

3. From the first day after delivery until convalescence has taken place, the uterine cavity as well as the vagina should be daily thoroughly washed out with water, as hot as may be well tolerated, to each pint of which may be added an equal quantity of sanital, which from its absence of color, as well as its aseptic properties and agreeable odor, seems specially suitable for the purpose. Carbolic acid and rectified spirit of turpentine are good, while corrosive sublimate is unreliable and dangerous.

4. He does not use a siphon syringe, but employs Moore Madden's irrigator.

5. As a general rule liquor creasoti (B. P.) should be administered two or three times daily in full doses. This may be advantageously combined with the tincture of the chloride of iron.

6. The prevailing type of puerperal fever is of a distinctly remittent typhoid character, and should be primarily treated by appropriate general stimulants and nutriments, as well as by attention to the removal of all septic matter from the uterus, in the way already pointed out. Turpentine, iron, quinine, ergot, and opium, are the only medicines that deserve consideration. Turpentine, the most important, may be exhibited per os, or per rectum, or by the skin. Turpentine is stimulating, depurating, increasing the elimination by the skin and kidneys, and arrests the development of micro-organisms.

TYPHOID AND TYPHO-MALARIAL FEVER.

The occurrence of an unusual form of typhoid fever during the past year, has aroused in the minds of many the suspicion that they may

have been too precipitate in the rejection of the belief that the typhoid and the malarial germs may co-exist in the same patient. It has been commonly observed that as a section is cleared up and properly drained malaria disappears and typhoid supervenes. From this fact it has been argued that an antagonism exists between the two poisons, and that the occurrence of one is sufficient evidence that the other does not exist. But, as we have said, this stand is being either deserted or not so tenaciously held as formerly. During the war there existed little doubt among army surgeons of the co-existence of the two and the differential diagnosis between typhoid and typho-malarial was clearly enunciated. Dr. Pierson Chapman, in a recent article in the Maryland Medical Journal, revives the points which were then emphasized, and certainly those who have had experience with the unusual form of typhoid, which occurred during the past year, will be disposed to give them consideration:

TYPHOID.	TYPHO-MALARIAL.
Typhoid occurs in all localities, most commonly in the North.	Typho-malarial only in miasmatic localities, most commonly in the South.
Invasion gradual and without remission.	Often begins as a simple remittent or intermittent.
Daily exacerbations and remissions slight.	Decidedly marked.
Diarrhœa the rule.	Constipation the rule.
Tympanitis common.	Tympanitis rare.
Abdominal tenderness considerable, epigastric and hepatic tenderness slight.	Abnominal tenderness slight, epigastric and hepatic tenderness considerable.
Temperature comparatively low, delirium low and muttering.	Temperature high, especially on outset; delirium active.
Spleen not involved.	Tumefaction of spleen very marked.
Sordes on teeth the rule.	Sordes rare.
Peyer's glands always involved.	Rarely involved.
Rose eruption present.	Generally entirely absent.
Pigment deposits absent.	Pigment deposits in various tissues and organs very common.

SMALL DOSES OFT REPEATED.

The exhibition of large doses at long intervals is what constitutes the difference between "allopathy," so-called, and homœopathy in the minds of the people. They know little or nothing of the views which obtain regarding the method in which drugs affect the system. With them one form of practice is represented by large and usually nauseating doses, and the other by small and pleasant doses. It is the small and pleasant doses which attaches adherents of homœopathy to that system, for few of them will maintain that the results of that method of prescribing are more prompt or satisfactory. It is, indeed, not an unusual thing to hear them admit that it takes longer for the homœopath to cure his patient, but it is "so much more pleasant."

The favor with which homœopathy has been received by the fastidious has not been without its effect on the observant of the regular school, and their practice has been divested of the objectionable features of large and nauseating doses. It remains a question, however, whether the reform in this direction has gone far enough, and whether good would not come of still further diminishing the size of the dose, and securing the necessary quantity by increased frequency of exhibition. The interval of three hours has, without any particular reason therefor, become so thoroughly engrafted in practice that it will be difficult to shorten it without strong argument for the change. Those who have given a trial to the method of small and often-repeated doses, however, pronounce it to be a very decided improvement—obviating to a large extent the disagreeable immediate effects of large doses and securing more rapid absorption. Fortunately for those disposed to attempt the innovation, our manufacturing pharmacists have placed at the disposal of the profession most excellent preparations of drugs to that end, in the shape of compressed tablets and the diminutive pills or granules, etc., containing fractional doses of their respective constituents. We have given these preparations a trial in the manner suggested, with very satisfactory results, and merely refer to the matter at this time with a view to eliciting expressions regarding it from our readers, from whom we shall be pleased to hear.

Notes.

The medical press in some sections is making a laudable effort to arouse the profession to a sense of the dangers which threaten from low fees. The word comes from Germany that a mark (10 cents) is the usual fee for a visit in some towns there, and if the reports are to be credited the pauper stipend is taking hold in this country. It is alleged that it is in cities having medical colleges, that the evil is most prevalent. It is due to the disproportionate number of young doctors who settle there. In St. Louis, for instance, it is alleged that reputable physicians are obliged to reduce their fees to keep their patients, and twenty-five cents for a prescription written in the office, and fifty for a visit to the home of the patient, are not unusual charges. This is certainly a great wrong, and it is too bad, indeed, that the Code of Ethics is powerless to correct it.

It is reported of an intelligent man who settled in a strange town and who wished to secure a medical adviser for his family, that he went to the postmaster to find out which of the local physicians took the most medical journals. His reasoning was that the man who takes the most journals of his profession, is well read and up with the times, and consequently the one whom any sensible man would prefer to employ. Unquestionably this reasoning is sound, but does not go quite far enough. He should have discovered which of the doctors pays his subscriptions to the journals most promptly. It is the man who promptly at the beginning of the volume transmits his subscription, that is the man to tie to. Such men are the pride to the profession and are always safe counsellors.

The unfortunate squabble which characterized the preliminaries of the late meeting of the International Medical Congress, in this country, will, from present appearances, be in a measure duplicated in connection with the next meeting. The French are very much chagrined because ef the selection of Berlin as the place of meeting, and have already begun to vent their spleen. They have almost concluded to absent themselves entirely, and are also busy sowing the seed of discontent among the profession of other countries. If this Congress cannot be continued without these unseemly squabbles, it were much better that it be abolished. It has created trouble in this country which will require many years to heal over.

There are no changes in the condition of the throat of the Crown Prince of Germany, except such as are natural to the disease (carcinoma), the diagnosis of which has now been definitely determined. The origin of the growth is just below the left vocal cord, and it has already begun to invade the right side. The Prince opposes total extirpation of the larynx, and as both sides are involved, partial removal is quite out of the question. Tracheotomy will be the only procedure under the circumstances, and this may succeed in prolonging his life for a year or two. The case goes to show that there is no infallibility in medicine as yet. When VIRCHOW and MACKENZIE err in a matter of this kind, the rank and file need not feel humiliated when they make a mistake.

The Musical Herald tells of a good dame who undertook to report to her husband the criticisms of various professors she had consulted regarding the culture of their daughter's voice. The first professor said the girl sings too much with her borax, and that if she keeps on she will have digestion of the lungs. He said she should try abominable breathing and practice solfudgery. The next one told her she should sing more with the diagram and not smother her voice in the sarcophagus. The third poked a looking glass down the dear girl's throat, and said the phalanx was too small, and the typhoid bone and the polyglottis were in a bad way.

The Archives of Pediatrics has secured the services of DR. A. JACOBI, of New York, who will contribute ten or twelve pages to each number, on therapeutical subjects connected with the diseases of children. DR. JACOBI is an authority on this subject, and withal a clear writer. He has outlined the course he will fallow in his proposed articles, and they will unquestionably constitute a valuable contribution. The Archives is published by J. B. Lippincott Co., of Philadelphia.

Washington is reported to be the best city in the world to practice medicine in. The chief reason is the fact that the population is largely composed of Department clerks and over these the physician holds a mysterious influence, which induces them to pay his bills before they pay those of the tradesmen. The secret lies in the fact that these clerks cannot draw pay for time lost on account of sickness, without the doctor's certificate, and it is the rule for the doctor to withhold this certificate until his bill has been secured.

The American Journal of Insanity traces the increasing prevalence of insanity in this country to our late civil war. A large proportion of the soldiers in that conflict returned home reduced in mental and physical vigor, and resuming or assuming the marital relation imparted their defects to their offspring. A very large number of the children thus begotten are said to have been admitted to institutions for the insane.

Professor to student: "Mr. Jones, what general instructions would you give the public as to their conduct in accidents, pending the arrival of the physician—in a case of fracture of the femur, for instance?" Student: "I should instruct them to skin about and have the doctor's fee ready." This dialogue occurred many years ago, and that student is now one of the illustrious few who have got rich out of the practice of medicine.

Surgeon: "Will you have chloroform or ether? I will let you have your choice." Patient: "I really don't know; I suppose it makes but little difference." Surgeon: "In other words, 'How happy you could be with either, were t'other dear charmer away.'" Patient: "Exactly. That's it. Give me either." And yet the surgeon gave him chloroform.

Medical Classics, in speaking of the gross blunders committed in the use of the words lie and lay, tells of a lady who consulted a Boston

physician, and in describing her disease, said: "The trouble with me, doctor, is that I can neither lay or set." "Then, Madam," was the reply, "I would respectfully suggest the propriety of roosting." The doctor had her *fowl*.

The following officers have been elected by the Detroit Gynæcological Society for the current year: Dr. E. W. Jenks, President; Dr. C. A. Devendorf, Vice-President; Dr. W. P. Manton, Secretary and Treasurer. Following the election the retiring President, Dr. C. B. Gilbert, entertained the Society with an elegant collation.

The Medical Herald says the latest parody on Sullivan's operatic song, "Three Little Maids from School" is much in vogue among the students of Bellevue:

> Three little maids from the seminary
> Met three boys with the secondary;
> Now they all take mer-cur-ary,
> Three little maids from school.

"Gentlemen," said a German professor, "I begin to-day my lectures on the practice of medicine. When a man is sick, nature and the disease are in conflict. The physician comes in and strikes at the disease. If he hits it, the man gets well; but—if he hits the man, it is all up with him."

In ordering their addresses of the AGE changed, subscribers should give previous residence as well as the new. The publisher says life is too short to warrant the examination of a list of over 5,000 names in order to find out where the doctor has removed from.

The Indiana Medical Journal tells of an American in Paris, who was about to die. He ordered the following dispatch sent by cable as soon as the last breath left his body: "Am dead. Corpse will follow by next steamer.

The root of the wild ginseng plant is said to be worth from $50 to $100 an ounce. That of the cultivated variety brings only from $1.25 to $2 a pound.

The Arab who invented alcohol has been dead 900 years, but his spirit still lives.

Book Notices.

TREATISE ON HUMAN PHYSIOLOGY. For the Use of Students and Practitioners of Medicine. By Henry C. Chapman, M. D., Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia, etc.
Philadelphia: Lea Brothers & Co.
Detroit: Phillips & Hunt.

With the many excellent text-books on physiology before the profession, and in view of the stage of advancement of the science, one naturally inquires for the *raison d'etre*, on the appearance of a new book on the subject. In the present instance the author's experience as a teacher convinced him that there is a want felt by students and practitioners of medicine for a systematic book, representing the existing state of physiology and its methods of investigation, and based upon comparative and pathological anatomy, clinical medicine, physics and chemistry, as well as upon experimental research. A work conceived on this plan, and representing in itself a successful carrying out of the plan, certainly commends itself to both student and practitioner. What is most demanded by the progressive physician of to-day is an adaptation of physiology to practical therapeutics, and we have often wondered why such a work as WILLIAMS' Principles of Medicine, for instance, has been permitted to go out of print. The author before us is not as practical as WILLIAMS, but his work is a decided improvement in this respect on the other works on physiology on the market. He has given us a book, which will at once take place among the most valuable text-books, and we cordially commend it to the consideration of the profession.

THE MEDICAL NEWS VISITING LIST FOR 1888. Philadelphia: Lea Brothers & Co.

This list has been thoroughly revised and brought up to date in every respect. The text portion (48 pages) contains the most indispensable data for the physician and surgeon, including even the latest therapeutic novelties, their doses and effects; while the classified blanks (176 pages) have been arranged and somewhat condensed, with an obvious gain in convenience. The obstetric engagements and obstetric practice, for instance, are now together, instead of being separate as formerly. Three styles are now published: Weekly, dated, for 30 patients); Monthly (undated, for 120 patients per month), and Perpetual (undated) so that The Medical News Visiting List adapts itself to any system of keeping professional accounts. Each style is in one volume, bound in handsome red leather, $1.25. When desired, a ready-reference thumb-letter index is furnished, which is peculiar to this Visiting List, and will save many times its small cost (25 cents) in the economy of time effected during a year.

FUNCTIONAL NERVOUS DISEASES. Their Causes and their Treatment. Memoir for the Concourse of 1881—1883, Academie of Medicine de Belgique, with Supplement on the Anomalies of Refraction and Accommodation of the Eye and of the Ocular Muscles. By George T. Stevens, M. P., Ph. D., Member of the American Medical Association, and of the American Ophthalmological Society: Formerly Professor of Ophthalmology and Physiology in the Albany Medical College.
New York: D. Appleton & Co.
Detroit: John Macfarlane.

The fact that this memoir received the highest honor in the competition which called it forth stamps it at one as an effort of unusual ability. The subject is one of great and growing practical interest, the present civilization being of a character which produces a very kaleidoscopic variety of nervous disturbances without appreciable organic lesion. DR. STEVENS has classified these in excellent form and devotes to each an exhaustive consideration. The supplement is very lengthy and is of greater value to the ophthalmologist than to the general practitioner.

OPERATIVE SURGERY ON THE CADAVER, By Jasper Jewett Garmany, A. M., M. D., F. R. C. S., Attending Surgeon to Out-door Poor Dispensary of Bellevue Hospital; Visiting Surgeon to Ninety-ninth Street Reception Hospital, etc.
New York; D. Appleton & Co.
Detroit; John Macfarlane.

The title of this book is sufficiently explanatory of its subject. The author has given careful consideration to his descriptions and in so far as his efforts are concerned the book is fairly successful. The great defect of the book, however, is the absence of illustrations, without which the most graphic description of an operation will be largely lost on the student.

Therapeutic Brevities.

A NON-IRRITANT ANTISEPTIC LIQUID—LÉPINE, who has studied the combination of various antiseptic substances, has found the following an efficient and non-irritant compound:

Corrosive sublimate, gr. $\frac{1}{60}$.
Carbolic acid, gr. 1½.
Salicylic acid, gr. 1½.
Benzoic acid, gr. $\frac{3}{4}$.
Bromine, gr. $\frac{1}{8}$.
Hydrobromate of quinia, gr. 3.
Water, ʒ 25.

This fluid may be used by parenchymatous injection or in dressing wounds.—*Journal de Medécine.*

HÆMOSTATIC MIXTURE.—PARVESI recommends the following as a hæmostatic mixture in gynecological operations, as being efficient and non-irritating:

Sulpho-carbolic acid, 25 parts.
Rectified alcohol, 25 parts.
Benzoic acid, 5 parts.
Tannic acid, 5 parts.
Glycerin, 125 parts.
Rose water, 200 parts.
For local use.

Sulpho-carbolic acid is composed of sulphuric acid 1 part and carbolic acid ¼ part, heated over a water bath for a few moments. Dissolve the benzoic acid in the glycerin, and the tannic acid in the alcohol.—*Gazette de Gynecologie*, Aug. 1, 1887.

ANTIPYRINE IN LUMBAGO.—The Paris correspondent of the British Medical Journal, relates a remarkable case of cure of lumbago by subcutaneous injection of antipyrine observed in a man, aged 42, a patient at the Hotel Dieu. He could not sit down, and once in bed could not sit up. The lumbago was rheumatismal, for his fingers and toes were also swollen. After a first subcutaneous injection of 50 centigrammes (7½ grs.) of antipyrine, the lumbago completely disappeared. The injection of 50 centigrammes of antipyrine was continued every morning and evening, and at the same time three grammes (45 grs.) were administered by the stomach. The action upon the fingers and toes, although not immediate, was very rapid. The man is now perfectly cured.

PHOSPHATE of lime is strongly recommended by DR. REBORY for night sweats of phthisis. M. POTAIN, and after him DR. REBORY, employ the tricalcic phosphate in doses of four grammes, often necessarily increased to eight and fifteen grammes. The excellent results obtained are attributed by DR. REBORY to some special action of the medicine upon the perspiratory apparatus. It would seem more likely that the general improvement in the condition of the patient brought about by the phosphate should be the reason for the diminution of the night-sweats one of the symptoms most indicative of the great debility of persons subject to phthisis.—*Phil. Med. Times.*

LACTIC ACID TREATMENT OF DIARRHEA IN CHILDREN.—VIGIER, on the principle that the green color of the diarrheal dejections of children is due to the bacillus discovered by DAMASCHINO and CLADO in 1884, and that this bacillus is destroyed by lactic acid, proposes, in opposition to the old treatment by alkalies, to give this acid, and as a convenient formula pleasant to the taste he gives this prescription:

℞—Acidi lactici, 2 grammes.
Syr. simplicis, 98 grammes.
Limonis ess., gtt i.
M.—S. Two or three coffee-spoonfuls daily.
—*Weekly Med. Review.*

FOR CONSUMPTION. — PROF. LUTON, of Rheims, in a long article, concludes that a cure of tuberculosis can always be effected by means of the phosphate of copper, which, however, must be in the nascent state and soluble in an

alkaline body. He thinks he has found a specific in the following formula;

Neutral acetate of copper, grm. 0.15
Crystallized phosphate of sodium, grm. 0.75.
Glycerin } each, a sufficient quantity
Powered licorice }
This for one pill.

Disinfectant Properties of Cocaine.—When cocaine is administered to the extent of 25 centigrammes or more daily, we soon notice that the various secretions and excretions—sweat, urine, breath, products of suppuration, and even in the fæces—gradually lose their fetidness, and even become quite odorless. From this fact, the clinical application is apparent, for we no longer dread the dangers from carbolic acid, sublimate, etc. It is in typhoid fever, at the adynamic period, with intestinal ulceration and fetid diarrhœa, that the new disinfectant is indicated. Benefit will accrue from the double property of the agent as an antiseptic and neurasthenic tonic.—Dr. Luton, in *Gazette Med. du Nord-Est.*

Variola.—Otvoes has used xylol, recommended by Tuelza, as an antiseptic and albumen-coagulating agent, in 315 grave cases of variola, and has met with great success. He gives it in wine in doses of 2 or 3 grammes daily; the total dose of the medicine has reached 24 grammes. Otvoes uses the following formula:

Xylol pur, 3 grammes.
Mint water, 50 grammes.
Distilled water, 50 grammes.
Syrup of cinnamon, 10 grammes.
Mucilag. acaciæ, 10 grammes.

A spoonful every two hours. The expired air of the patients had a strong odor of xyolol.—*Journal des Sciences Medicales de Lille-Lyon Med.*

Injection for Infantile Convulsions (J. Simon).—

℞ Musk, 0 gr. 20.
Camphor, 1 gramme.
Chloral, 0.50.
Yolk of egg, No. 1.
Distilled water, 150 grammes.

The bowel must first be emptied by a large simple enema, or with the addition of oil.—*Progrès Med.*

Pityriasis Versicolor.—

℞ Acid salicylic, 3 parts.
Sulphur precip., 10 parts.
Lanoline and vaseline, ää 50 parts.

Apply at night, after washing with tar soap.

A Fumigation for Asthma.—Sawyer ("Birmingham Med. Rev."; "Lyon méd.") recommends the following as having afforded the best results that he has observed among those of a great number of inhalants:

Potassium nitrate, } each 2 parts:
Powdered aniseed, }
Powdered stramonium leaves, 4 parts.

A thimbleful of the mixture, fashioned into a little cone, is placed on a plate and lighted at the top.—*N. Y. Medical Journal.*

Resorcin in the Treatment of Skin Diseases.—The "Union Médicale" credits Ihle with the following formula:

Resorcin, 10 to 15 parts,
Castor oil 90 parts,
Alcohol, 300 parts,
Balsam of Peru, 1 part.

This liniment is recommended by the author in the treatment of chromophytosis, eczema marginatum, alopecia areata, and seborrhœa.—*N. Y. Med. Jour.*

Infantile Constipation.—A very successful remedy for this is podophyllin in small doses; iridin may be combined with it with good effect. Make a tincture of the following: Podophyll. resin, eight grains; iridin, five grains; spt. ammon. arom., one dram. Digest for several days and filter. From one to two drops of this may be combined in mixture along with syrup of orange. This is the dose for a child of one year and under.—*New York Medical Record.*

Compound Salicylated Plaster.—After repeated experiments Mr. Rutenik (N. Y. Med. Journal) has found the following formula to give the best mass:

℞ Emplastri diachyli simp.,
Emplastri saponati, ää 40 parts.
Petrolati, 15 parts.
Acidi salicylici, 5 parts.
M.

This plaster is said to be especially beneficial in the treatment of eczema and chronic ulcers of the leg.

Treatment of Herpes.—The Med. World gives this formula for the cure of herpes:

℞ Hydrargyri oleatis (20 per cent.), ℥ vij.
Acidi oleic., ℥ ij.
Etheris acetici, ℥ ij.
Morph. sulphat., gr. iv.

Misce. Sig.—To be used as a paint.

Medical Progress.

STROPHANTHUS HISPIDUS. — Strophanthus is a member of the botanical family *Apocynaceæ*. It is indigenous to southern Asia, but grows in greatest abundance in tropical Africa. In Africa, certain of the natives employ the plant to poison their arrow-heads. Its active principle is *strophanthine*, a glucoside.

The plant had been the subject of study previously, but it was reserved for PROF. THOS. R. FRASER, of Edinburgh, to point out in detail its chemical, physiological and pharmacological properties, and to make a therapeutic application of the same. His latest account of the drug was published in the British Medical Journal. Nov. 14, 1885.

Experiments prove that strophanthus, like digitalis, is a powerful cardiac stimulant, and, if exhibited in sufficient doses, causes death by paralysis of the heart.

After laying bare the heart of a frog poisoned by strophanthus, it will be observed that at first there is increased rapidity of the pulsations, but soon they slacken and finally cease. It is a curious phenomenon that, after the ventricular action stops, the auricles still continue their contraction and relaxation for a brief period.

Not only frogs, but turtles, snails, birds, rabbits, dogs and cats are killed by the active principle of strophanthus Death ensues sooner after a subcutaneous injection than by absorption from stomach or rectum.

Experimentation, with a view to compare the rapidity of action of strophanthus and digitalis, establishes the fact that strophanthine produces death much more rapidly than the same dose of the purest crystals of digitaline. In studying the comparative strength of these drugs, it was ascertained that, although a solution of digitaline, one to four thousand, does not stop the heart of a frog, yet a solution of strophanthine, one to ten million, kills the animal.

In warm-blooded animals, death occurs much sooner, and the higher in the scale of life the animal is, the more speedy is the action of strophanthus in destroying life.

In mammals, death is very rapid. In five minutes after the injection of a poisonous dose of strophanthus subcutaneously, you notice signs of malaise, dyspnœa, disturbances of respiration, afterwards emesis, muscular paralysis, extreme irregularity of pulse and respiration, and, after a violent convulsion, death.

Susceptibility to the action of the drug may be diminished. As in the case of opium, a therapeutic dose may be taken with impunity. This dose may be increased gradually until an amount may be administered that, if given at the outset, would have produced toxic effects.

Strophanthus, when introduced into the system, communicates its toxic properties to the blood, as is evidenced when a portion of the blood of a poisoned frog is injected into a healthy animal. Africans realize this fact, for they remove carefully the tissues around the wound in the dead animal.

A small dose has no apparent influence on the motor excitability of nerves, nor on their power of conductivity; and, should the reflexes be abolished, that disappearance is attributable to modifications undergone by the muscles, as they are sooner affected by strophanthus than the nervous system. Unstriped as well as striated muscular fibres are paralyzed, and, when their contractibility is once lost, no stimulus can excite them. The unstriped muscles lose their excitability much more rapidly than striated.

The vascular system is not altered by strophanthus, a characteristic distinguishing it from digitalis.

It has been proven that the drug acts on the heart, not through the medium of the medulla, the sympathetic system, nor the inherent ganglionic centres of the heart. It acts by simple contact with the muscular structure of the heart.

The heart, after death, is in a state of ventricular systole, and its muscle in a condition resembling cadaveric rigidity. It may be noted here that, among all the cardiac poisons, strophanthus leaves the heart after death in systole.

So much for the history and toxicology of strophanthus hispidus. The pharmacology of the plant has a more practical side.

It was in incompetency due to valvular lesions that strophanthus was first proven of inestimable benefit.

DR. DENIAU illustrates, by a series of sphygmographic tracings, the action of strophanthus.

A patient was admitted to the hospital with imperfect systole, orthopnœa, pulmonary œdema, cough, anasarca, passive congestion of the liver and the spleen, cardiac hypertrophy, a soft, indistinct *souffle* of apex, radial pulse, well-nigh imperceptible and incapable of count, and irregular. Under strophanthus, the pulse diminished to forty-eight and respiration to twenty-eight at the end of the fifth day, and there was an amelioration of all the other symptoms.

At the same time, there was a notable increase in the amount of urine, although strophanthus has no action in the calibre of the arteries. The diuresis was owing to the stimulation of the heart itself.

Not only in a systole consequent on valvular lesions, but in any case a cardiac stimulant is indicated, strophanthus is beneficial.

It has been employed in fatty degeneration of the heart, in acute endocarditis, in atheroma of the arteries, in chronic Bright's disease, in ascites produced by cirrhosis of the liver, and certain pelvic tumors, in the enfeebled heart after acute and chronic fevers, in acceleration of the pulse, and in reflex palpitation of neurasthenia, hysteria and chlorosis.

Strophanthus acts similarly to digitalis on the heart, but it is not an accumulative poison. DR. EMIL PIUS, of Vienna, says in disturbances of compensation, strophanthus acts well. The pulse becomes stronger and diminished in frequency, respiration normal, and dyspnœa less marked. In asthma, the paroxysm was shortened and prevented. Diuresis begins, and œdema disappears, not to re-appear save in exceptional cases. In every way, the patient experiences relief.

What is very noteworthy, is that the time in which strophanthus acts is short. Dyspnœa may be relieved in a few minutes, and, in less than an hour the pulse becomes modified. The action is persistent. When there is but a slight disturbance of compensation, relief by a single dose continues for three or four months without a relapse.

The drug is certainly efficacious against the dyspnœa, orthopnœa, and dropsy of morbus Brightii. Its uremic complications disappear on account of the acid reaction of strophanthus, and the power of increasing the blood-pressure without any vaso-motor constriction of the arterioles.

In certain disturbances of circulation, it is of great importance to preserve the patency of the arterial system. In aortic stenosis and insufficiency, and in atheroma of the arteries, it is very essential not to increase the work of the heart by a resistance antagonistic to its propulsive power. The same is true of mitral valvular lesions, and, in a general way, in all diseases accompanied by an increase of the arterial tension.

In almost every instance, it is theoretically advantageous to localize the action of the drug on the heart itself, to the exclusion of the arterial system and the stomach. Strophanthus fully accomplishes this object, and so it is invaluable in the long list of cardiac tonics.

Like digitalis, strophanthus is absolutely contra-indicated in the period of compensation of the heart. It then could only disturb its physiological action. In the feeble heart of pneumonia and phthisis, strophanthus is useful, and DR. FRASER is inclined to believe that it diminishes the fever.

Thus far there have been only moderately good results in asthma, cardiac neuroses, angina pectoris, and in the dyspnœa of hysteria and chlorosis. In a general way, we may state that no good result follows the use of strophanthus in bronchial asthma, nor in acites depending on stasis of the portal circulation.

Consequently, strophanthus is contra-indicated in ascites of tumors, hepatic, splenic and pelvic, in respiratory and circulatory troubles of vaso motor origin, in active hyperæmia, and in cases in which there is a tendency to visceral hemorrhages.

To strophanthus belongs the superiority over digitalis in the treatment of Bright's disease, and in a general way, in valvular lesions of the heart. As a diuretic, it is not equal to either calomel, digitalis, or acetate of potash.

Thus we have in strophanthus one of the most important acquisitions to therapeutics. It does not exclude digitalis, but one is the complement of the other.

It differs from digitalis in stimulating the heart without any vasomotor constriction of the arterioles. It diminishes the pulse, lowers temperature somewhat, is a diuretic, is not hæmostatic nor cumulative, and, unlike digitalis, it causes no gastro-intestinal disturbance. —DR: L. DENIAN, in *Bull. Gen. de Therap.; Buffalo Med. and Surg. Journal.*

THE ABORTIVE TREATMENT OF GONORRHŒA.—O. T. OSBORNE, M. D., New Haven, Conn., in the N. Y. Med. Jour., Oct. 8, 1887:— Before discussing the methods of aborting, it might be well to ask how shall we know that a gonorrhœa has been aborted?

If we stop it in a few days have we aborted it, or was it a very mild case of gonorrhœa?

If it continues, have we succeeded by substituting a healthy inflammation for an unhealthy one, as BUMSTEAD and TAYLOR maintain the abortive treatment does, or is it an unsuccessful abortion and the inflammation a continued gonorrhœa? It seems to me that unless we believe in the gonococcus we cannot decide.

Believing in the gonococcus, we have gonorrhœa until the gonococcus disappears from the pus, and all abortive treatment is unsuccessful which does not bring about that result.

As to the various abortive treatment and the belief in the utility of the same, I will quote from various authors.

DR. BOCKHART, who has so ably described the action of the gonococcus, does not believe in abortive treatment, as at the time the patient presents himself the infection has gone too far. WELANDER, on the other hand, a firm believer in the gonococcus, regards abortive treatment, if the patient is seen during the first few days, as the proper treatment. His method is to first cleanse the anterior portion of the urethra, chiefly the fossa navicularis, with absorbent cotton, thus removing a quantity of epithelial cells which will show many gonococci in or upon them, and then to cauterize with a solution of nitrate of silver.

BUMSTEAD and TAYLOR, who believe gonorrhœa to be a simple inflammation, highly rec ommend the abortive treatment in the first days of the disease. It is difficult to see, if gonorrhœa is a simple inflammation, what it is they propose to abort. If there is nothing to neutralize, counteract, or kill, why add a simple inflammation to one already existing, the inflammation being acute?

STURGIS, who does not believe gonorrhœa to be a specific inflammation, rejects the abortive treatment with nitrate of silver as liable to cause untoward results, and as also unsuccessful in limiting the disease.

KEYES, who, it will be remembered, believes gonorrhœa to be specific, says "the abortive treatment with corrosive injections is dangerous, and absolutely uncertain in its results."

"Those cases which get well," I quote, "are cases of urethritis, which, doubtless, would have recovered promptly under mild treatment, and when it does not cure, it greatly increases the intensity of the inflammation, and leads with much certainty to stricture ultimately and immediately, in many cases to complications of the bladder and testicle."

J. W. WHITE, the writer of the article on gonorrhœa in the "Encyclopædia of Surgery," is very consistent. Not believing in a specific germ, he does not believe in an abortive treatment.

OTIS believes genuine gonorrhœa cannot be aborted, but must run its course of about four weeks. He says if it is aborted it was not gonorrhœa, but he fails to say what it then was.

WYETH, who believes gonorrhœa to be specific inflammation, disapproves of all corrosive injections, and, in fact, all injections of any kind, during the first stage.

SCHROEDER believes gonorrhœa to be specific, and recommends, in the female, an injection of a five-per-cent. solution of carbolic acid as a preliminary treatment.

FRITSCH says nothing of an abortive treatment.

DR. CHARLES T. MITCHELL, of Philadelphia, disapproves of the injection of the corrosive solution recommended to abort gonorrhœa, as tending to convert a mild attack into a severe one, and to cause stricture. But he does recommend the use of bougies of some germicide,

to either neutralize or modify the action of the specific virus.

Dr. Grandin, a writer in the New York Medical Journal, believes corrosive sublimate, and nitrate of silver to be alone deadly to the virus of gonorrhœa.

Munich, of Armsterdam, recommends injections of resorcin (three-per-cent. solution) as abortive for gonorrhœa.

Dr. Trusewicz, of St. Petersburg, has observed that amykos, an antiseptic, consisting of boric acid and thymol, will shorten gonorrhœa.

Castellan, a Frenchman, has found an alkaline injection—namely, a one per-cent. solution of sodium bicarbonate in water—very useful in shortening gonorrhœa and preventing disagreeable symptoms.

Another French writer, Dr. Martineau, says that the gonorrhœal discharge from the vagina is always acid (as shown by litmus-paper), while the simple form of vaginal discharge is alkaline.

In closing this paper I will give a résumé of the subject as I believe it now stands:

1. Gonorrhœa is specific inflammation.

2. It is, in all probability, caused by a special microbe.

3. The gonococcus of Neisser is, almost beyond controversy, the specific cause of gonorrhœa.

4. The abortive treatment of gonorrhœa with corrosive injections is unjustifiable and unsatisfactory.

5. The only abortive treatment should be with weak antiseptic injections, combined with the constitutional treatment.—*The Epitome.*

Proposed Chemical Lung Test.—Dr. Zaleski, of the Dorpat Physiological Institute, has published in the Vratsch (No. 32) an account of some researches he has been making with the object of introducing a new lung test, which may be trusted to give satisfactory results in cases where the hydrostatic test is inapplicable or of doubtful value. He suggests that, as at the moment of birth there is not only an influx of air into the lungs, but a very marked increase in the blood circulating through them, and as blood contains in a tolerably definite proportion, the quantity of iron found in the lungs should furnish a clue to the question as to whether the child had breathed or not. He examined the lungs of four stillborn children and of three children born alive; also those of a healthy man who had been killed by an accident. Having of course taken care that the lungs had not been subjected to any previous section or manipulation, he tied the roots and cut off the bronchi. They were then immersed in distilled water for the hydrostatic test, and, after being dried with filtering paper, they were weighed in a platinum dish, and sections were made and carefully examined. After this they were dried in a hot-air chamber at from 115° to 120° C. until they ceased to lose weight. Soda was added to the dried lung substance, also water, and the whole was dried in a water bath. The mass was then ignited in a Bunsen's burner, treated with water, and thrown on a filter, which gave no ash. The whole was then again ignited. Here, all the iron was, of course, not in the filtrate. It was then heated with strong hydrochloric acid in a water bath. After the hydrochloric acid had evaporated, the residue was treated with sulphuric acid, reduced by zinc, and the iron estimated by a solution of permanganate. The result of the observations showed that the iron contained in the lungs of children that had breathed was always considerably more in proportion to their weight than in the lungs of stillborn children. The mean percentage of iron (Fe) in the lungs of the stillborn was 0.0110 of the weight of the fresh lung, and 0.0828 of that of the dried lung; whereas the mean percentage of iron in the lungs of the children who had been born alive was 0.0188 of the weight of the fresh lung, and 0.1182 of that of the dried lung. The iron in the case of the adult was still more than in that of the infants, the percentages being 0.0217 and 0.1266 of the fresh and dried lung substance respectively. In one case in which the child had lived for five days part of the left lung was found diseased, there being evidences of septic pleuritis and pneumonia. Here the diseased portion of the lung was seperately examined, and found to contain a percentage of 0.0192 of iron in the fresh state, and of 0.1197 in the dry state, so that it would appear that the "iron lung test" holds good even for diseased lungs. The author has not made observations in cases where there has been profuse hæmorrhage from the cord, nor in those where putrefaction has commenced, but he thinks it probable that the test would answer here as well as when the lungs have been immersed in spirit. Of course, artificial inflation after death would not vitiate the test, as was indeed proved by one of the cases where Schultze's method of inflation was adopted five hours after stillbirth. Dr. Zaleski's "iron lung test" is evidently of too complicated a nature to be carried out by the ordinary practitioner, but in doubtful cases it would be quite practicable to preserve the lungs and send them to an expert, just as the stomach and other viscera are sent in poisoning cases. Before, however, any real value can attach to evidence deduced from it, a large number of experiments must be made by different observers, and their results collated.—*Lancet.*

Antipyrine in Acute Bronchitis of Children.—For some months innumerable articles have appeared in current medical literature discussing the physiological and therapeutic action of antipyrine. That the drug has a wide range of usefulness is an undoubted fact, and yet many practitioners who welcomed it gladly at first are now regarding it with some suspicion because of the occasional toxic effects that they observe from it, and with some misgivings because of the failure to obtain expected results from its use. There is little doubt but that the drug will obtain a permanent place in therapeutics, but we need much more exact information in regard to the indications for its use. It is surprising, as Friedlander points out in a late number of the Therapeutische Monatshefte, that among so many articles describing the action of the drug, so few have appeared which consider its usefulness in the diseases of children. Friedlander has observed with care the indications by which the usefulness of the drug can be gauged in individual cases of acute bronchitis

in children. It is just such observations that are needed to enable the physician to use medicines to the best advantage. He says that before using antipyrine he lost many children who were attacked with this disease, and its duration was from two or three weeks. Since using it the mortality has been wonderfully diminished and the average duration reduced to one week.

If the cases of bronchitis are classified according to their amenability to antipyrine two groups must be formed, the first embracing those that are most benefited by the drug, and the second those that receive little aid from it. The first group embraces those who have a temperature of 104° F. (40° C.). and who are well nourished; the second those that have a moderate temperature, 102° F. (39° C.) or less, and who are not well nourished. Both classes are aided by antipyrine treatment, but the former much more so, as is shown by the following statistics. FRIEDLANDER says that in a recent severe epidemic of acute bronchitis among children in his neighborhood, he, as well as his fellow physicians, lost 50 per cent. of their patients, but since he has used the antipyrine treatment he has lost none of his patients belonging to the first category, and the duration of their illness has averaged not more than a week, and the percentage of loss in the second category is reduced to 10. He suggests that the reason why the drug does not apparently accomplish as much good in weak children is because they are not able to withstand its unpleasant side effects, such as the profuse sweating that it induces. Usually, after the administration of a dose, the little patients break out in a profuse perspiration, the temperature falls, they sleep for an hour or so, and awake with a feeling of well-being. The cough is usually looser and the breathing easier. The dosage recommended is for children under five and over two years, 12 or 13 grains (0.9 gm. Its effect will continue for from twelve to fifteen hours, and therefore two doses must be given daily. To a child two years old or less, 7 grains (0.5 gm.) may be given, but only one dose will be needed in the twenty-four hours. During convalescence one half of the above-mentioned quantities are given at a time. The treatment of acute bronchitis among children by antipyrine, as recommended by FRIEDLANDER, does not exclude the simultaneous use of expectorants.—*Jour. Amer. Med. Association.*

THE USE OF PILOCARPINE IN THE TREATMENT OF ACUTE AFFECTIONS OF THE RESPIRATORY ORGANS.—Following the advice of leading French physicians, DR. WYSS has lately frequently used pilocarpine in acute affections of the respiratory organs. In many cases speedy relief was observed. DR. WYSS prefers the internal use of this drug, to which patients more readily submit than to subcutaneous injections. He prescribes: ℞. Hydrochlorate of pilocarpine, half a grain; distilled water, three ounces; to be divided into two or three equal parts by the graduation of the phial. Of this, one half or one-third is to be taken directly after having retired to bed. The following cases will illustrate the action of this remedy (Der Fortschritt):

1. *Acute coryza*, in a young man aged twenty-one. Two days after attack, respiration through the mouth, violent frontal headache, intense congestion, and tumefaction of the conjunctiva; pharyngeal dryness. One-sixth of a grain of hydrochlorate of pilocarpine at bed-time. Great relief since the first night. Recovery in three days.

2. *Acute laryngitis.*—Miss S——, aged twenty, a teacher of singing. Complete loss of voice; congestion of the whole interior of the larynx; grayish-yellow secretions covering the vocal cords. Pilocarpine, one-sixth of a grain, at bedtime. The voice considerably clearer since the morning following the first dose of pilocarpine. After eight days the voice was perfectly clear and normal, and the patient was able to resume her lessons.

3. *Acute pharyngo-laryngitis*, in a man aged forty-four. The patient had been suffering for three days, especially during the nights, from frequent attacks of suffocation, in consequence of the intense œdematous swelling of the inter-arytenoid space. Complete loss of voice; moderate, thick, grumous, grayish expectoration. One-sixth of a grain of pilocarpine at bedtime. Voice restored on the morning following the first dose. The tumefaction of the inter arytenoid mucous membrane had almost entirely disappeared; no more attacks of suffocation. The patient resumed his occupation as foreman in a large factory, continuing, however, the pilocarpine for a week.

4. *Acute laryngo-bronchitis.*—Patient, aged forty, in bed, suffering from violent dyspœna and labored, loud respiration; the voice hoarse; the laryngeal mucous membrane, especially the vocal cords, intensely red. Temperature, 101.3° F. One-fourth of a grain of pilocarpine at night. This dose had very powerful effects; violent colic, cold perspiration, the feeling of sinking (the patient feared to die) during three hours, but on the following morning so manifest a relief and improvement that on the same day he was able to attend to his usual duties. From this time uninterrupted recovery.

5. *Bronchitic asthma and hypertrophic rhinitis*, in a lady aged thirty-two. The patient for eight days had been obliged to pass half the night sitting up with the windows opened. Pilocarpine, one-sixth of a grain, at bedtime. Since the first evening considerable relief, the patient being able to rest the whole night in bed and sleep quietly, undisturbed by any more attacks. Discontinued the pilocarpine after twelve days. This patient, who had been for nine years a great sufferer from asthmatic attacks, stated that no other remedy had ever given her such rapid and permanent relief. She has been free of attacks since she took the first dose of pilocarpine.

THE EARLY SIGNS OF LOCOMOTOR ATAXY.—DR. MAX KARGER has published as a graduation dissertation in the University of Berlin, an account of a number of observations made on one hundred and seventeen cases of locomotor ataxy in PROFESSOR MENDEL'S clinic, with a view of detecting the early symptoms of this disease; for, as he says, the great hope of a really rational and satisfactory method of treatment lies in the recognition of the existence of the disease in the earliest stages. The history given by the patients, established a connection

between syphilis and locomotor ataxy in fifty-three per cent. of the cases. In the earlier stages he found symptoms affecting sensation, lancinating pains, numbness, especially of the lower extremities, cord-like sensation round the waist, retardation of the rate of conduction of sensations, and what he looks upon as especially important, being almost always present, the so-called Romberg's symptom,—*i. e.*, the inability or great difficulty of balancing the body when the feet are placed parallel and close together, the eyes being shut,—which however, he does not consider is due to the ataxy, but thinks it is an abnormal condition of sensation. With regard to ophthalmic symptoms, he finds that at the commencement of locomotor ataxy there is a diminution in the acuteness of vision and a concentric contraction of the field, amblyopia and amaurosis, which were due in thirty-five per cent. of the cases to atrophy of the optic nerve. Then there were slight and transitory paralyses of the eye-muscles. Insensibility of the pupil to light was found in sixty-six per cent. of the cases, and was due sometimes to a paralyzed condition of the sphincter and sometimes to disturbances of reflex action. With reference to the patellar reflex, the author thinks it has been considered to be absent rather too universally. He found it in eight of his one hundred and seventeen cases. The bladder reflex was often diminished, so that chronic vesical disease, the cause of which is not to be made out, ought to lead a medical man to think of tabes. Impotence was much more common than any increased sexual reflex. Very rarely gastric and cephalic "crises" and joint-affections were noted. The author suggests that complaints of a vague nature, such as nervous pains, eye or bladder troubles, should lead the physician to make a thorough examination with special reference to the want of patellar reflex, Romberg's symptom and the want of reaction of the pupil, as these objective signs do not necessarily give rise to any subjective symptoms.—*The Lancet.*

Large Doses.—Recklessness in the administration of large doses of drugs is always to be deprecated, but many medicines in our armamentaria may be judiciously prescribed in far larger quantities than has been hitherto sanctioned, in chosen and suitable cases. Delirium tremens and surgical shock may often be benefited by tincture of digitalis in one, two or even three drachm doses.

Succus conii is efficacious in chorea in ounce or larger doses. A drachm or even two of tincture of belladonna may be given in some cases of urinary incontinence; a child can take at least twenty minims with safety. Quinine may be and frequently is administered in half grain doses. Tincture of hyoscyamus renders good service in drachm doses, as also bromide of potassium. Large doses of iodide of potassium are frequently of immense value, in many instances.

Dysentery is shorn of much of its terrors by large doses—half a drachm or more—of powdered ipecacuanha. A drachm of tincture of perchloride of iron is not too much sometimes in diphtheria and erysipelas. Five or six grains of sulphate of zinc can be given without nausea in chorea. Tincture of nux vomica is safe and useful in twenty or thirty minim doses; and the liquor strychniæ of the British pharmacopœia, of which the official dose is from four to ten minims, is often given in half-drachm doses in alcoholism, with telling effect; this represents a quarter of a grain of strychnia. A drachm of antimonial powder has been administered with advantage. Heart troubles are frequently relieved by fifteen-minim doses of tincture of aconite, three times in the day. Subnitrate of bismuth may be taken by the drachm in certain affections of the stomach, diarrhœa and dysentery. One drachm of chloroform is safe and useful for "worms." Phosphorus may be used in doses of one-twelfth of a grain without danger, so long as the urine is watched. Croton-chloral hydrate, originally prescribed in grain doses, relieves neuralgia in ten-grain doses, which may be repeated at intervals of four hours. Even a grain of morphia is often required several times daily, and sometimes every hour, in special cases; but of course great caution need be observed.—Dr. L. Lewis, in *Medical and Surgical Reporter.*

Fluid Extract of Pichi in Vesical Catarrh.—Dr. H. S. Delamere, of Lubec, Me., referring to the use of pichi in the treatment of catarrh of the bladder, as reported by Dr. G. T. Comstock, relates the following case:

"A. B——, aged twenty-eight, had been suffering for two years from vesical catarrh. He had had gonorrhœa, but a No. 21 (French) bougie passed without difficulty, causing, however, considerable vesical tenesmus. When I was called to see him he was passing urine every hour during the day and four or five times during the night. The urine was alkaline, ropy and ammoniacal, and the microscope revealed pus. I gave the usual remedies prescribed in country practice, such as buchu, uva ursi, etc., but without benefit. I then resorted to washing out the bladder by means of the double-channel catheter, with the effect of relieving my patient slightly. The least exposure, however, aggravated all the symptoms and caused as much suffering as ever. After about a year and a half of constant treatment, with no other result than to keep the disease at bay, I received a sample bottle of fluid extract of pichi, which I tried. After the patient had taken it a few days he expressed himself as feeling better. He was now getting up twice during the night. But the sample was gone, and I was obliged to wait until I could get a fresh supply. In the meantime the patient grew worse; had to get up three or four times during the night. As soon as the drug arrived I commenced giving him twenty drops four times a day, which dose I increased to thirty drops. In a few weeks my patient was so much better that I abandoned washing out the bladder, and to-day he is at work. The urine is clear, free from mucus and pus, and has no ammoniacal odor. He sleeps well, and does not have to get up more than once during the night. Notwithstanding he suffered recently from a severe cold, the bladder trouble has not returned. The man's general appearance is healthy, appetite good, and he seems well."—*Medical Record.*

A New Method of Treating Diseases of the Skin Locally.—Dr. Knaggs (International Medical Congress, 1887), proposed as a substitute for ointments the employment of emulsions which upon drying on the skin form protective films. He had employed these dressings for the past two years with gratifying results in eczemas and other non-specific exudations. The inunction of the body with fixed oils has been found of immense service, but they are not adhesive, and exuding fluids readily escape from the surface. There are two methods of rendering oily substances adhesive: (1) By adding to them resinous gummy, or alkaline substances. (2) In making use of gums to combine or emulsify a fat with water.

Adhesive preparations, unlike oils, tend to arrest skin-action. Thus tar, varnish, or collodion form an impervious covering. Ointments to which adhesive substances are added diminish skin action, but do not abolish it.

Well-made emulsions resemble milk or cream, are soluble in watery fluids, and are markedly adhesive, and are made by combining an ointment-basis with water, a vegetable gum, and a suitable antiseptic.

Thus the formula preferred would read:

℞—Paraffine molle, ℥ j.
Pulv. gum acac., gr. 160.
Boracic acid, gr. 16.
Aquæ, ad. ℥ ij.
Stir until emulsified.

Bismuth, zinc, sulphur, or other medicament may be added as desired. Smeared over the skin, a film is formed, which is flexible and protective, and the antiseptics and medicaments have the best opportunity of exercising a beneficial influence.

The author called especial attention to the fact that all lint and textile dressings could be dispensed with. He did not expect these gum emulsions to displace older methods, but that they would serve a useful purpose.—*The Epitome.*

A New Remedy for Burns.—Many remedies have at one time or another been proposed for the surgical condition following the application of excessive heat to the body, and while some of these are of value, still all are more or less unsatisfactory. The alleviation of the pain and suffering attendant upon burns is one of the most important points in the case, toward which the surgeon directs his efforts. The shock from this cause alone, is sufficient oftentimes to produce death, and always is great. Accidentally, I recently discovered a remedy, which is easily applied and exceedingly prompt in its action. I was called in some haste to a little child about three weeks ago, who was badly burned about the hands and face from falling on a hot stove. The burns were deep, the pain excessive, and the shock very considerable. I hastily sent to the drug-store for a mixture of lime-water, olive oil and carbolic acid. While waiting for this, I prepared to give the child a hypodermic injection of morphine, with which to allay the agony, which was so great that convulsions seemed imminent. While I was getting ready to do this, I espied upon the shelf a bottle of Pinus Canadensis (colorless), which I had some time before ordered to be diluted as a vaginal wash for the mother. Remembering its wonderful soothing influence in acute inflammations of the vagina, I at once concluded to try it. Taking a corner of a soft hankerchief, I rapidly painted the injured parts, when, like magic, the pain ceased. You can well imagine my surprise and delight at the result. I directed a camel's-hair brush to be purchased, and had the mother make free applications, and the case had no other treatment, save a little iodoform ointment later on. Since this, I have tried it in several cases, both slight and severe, and with the same delightful results. The preparation used was made by the Rio Chemical Co., of St. Louis, Missouri.—*Chicago Med. Jour. and Examiner*, Aug., 1887.

A New Operation to Supplant Herniotomy.—Prof. A. C. Bernays, of St. Louis, proposes (St. Louis Medical and Surgical Journal) a new operation to supplant herniotomy. At the present time it is the rule, in cases of strangulated hernia, to resort to herniotomy as soon as it is found impossible to return the gut by medicinal treatment and taxis under chloroform—a practice attended by very unsatisfactory results because the death-rate even in the hospitals is very considerable. The procedure proposed by Dr. Bernays is one devoid of danger and one that seems likely to enable any ordinary practitioner to quickly reduce strangulated hernias whether oblique or direct inguinal, or femoral. It consists simply in the subcutaneous tenotomy of the crural arch, in other words, in cutting through Poupart's ligament. The incision is to be made about the middle of the ligament in an upward direction and need not cut anything but the ligament itself. A small incision one-eighth of an inch in length is made, through the skin only, in a vertical direction exactly in the inguinal fold. Next a probe-pointed knife is pushed through the subcutaneous fatty tissues under Poupart's ligament, which is found tense, and by pressing the ligament against the edge of the knife from without with the left hand while the right holds the tenotome, the ligament must be cut. The knife is withdrawn as soon as the resisting ligament is divided. If, after the probe-pointed knife is introduced, Poupart's ligament is found relaxed, it should be immediately withdrawn, for the case is probably one of those (fortunately exceptional) ones in which the strangulation is caused by the sac itself, and this cause is not to be sought for in the inguinal or femoral canals. After the ligament is cut the hernia will almost immediately slip back if the patient be not too deeply anæsthetized. If unsuccessful, herniotomy may be afterward performed as usual.

Study of Nervous Dyspepsia.—Experiments were performed among insane patients, and hitherto only upon melancholic patients who were perfectly free from any stomach trouble. The following facts could be deduced:

1. The rapidity with which the stomach empties itself after the administration of a meal, consisting of an ordinary mixed diet, is much increased.

2. The acidity of the stomach during digestion is much greater than in perfectly healthy people (hyperacidity).

3. The strong acidity is entirely due to the presence of free hydrochloric acid. Organic acids seldom find their way to the stomach, and if so, only in diminutive quantities.

4. The peptic power of the stomach upon meats is excellent. The peptic power of the filtered contents of the stomach upon albuminates about normal.

5. A continued hypersecretion of the juices of the stomach, after the contents have passed through the stomach, does not take place.

6. Dilatation of the stomach was not found.

It would be supposed that the hyperacidity of the stomach would give rise to some unpleasant symptoms. The reason that it does not is probably owing to the short space of time that the contents remain in the stomach, and besides the observations were all made upon patients with perfectly healthy stomachs; moreover, the hyperacidity was not of the strongest kind, but only moderate.

The therapeutic value of these experiments would consist in avoiding hydrochloric acid and pepsin, and all articles of diet which would excite the secretory glands of the stomach in the dietetic treatment, and in case the acidity causes any unpleasant symptoms to administer bicarbonate of soda.—*The Weekly Medical Review.*

Bichloride of Mercury in Obstetrical Practice.—There has been no more rabid antagonist to intra-uterine or even vaginal injections of solutions of mercuric bichloride than the Index. With the long array of deaths from the use of so-called mild solutions, it seems almost criminal practice to resort to the use of this highly poisonous and dangerous drug. Fleischmann, the first assistant in the obstetrical clinic at Prague, adds another to the long list of deaths following the use of corrosive sublimate injections during and after labor. Two injections were given, one before and one after the examination of a young primipara. Shortly after the second there was a discharge of bloody mucus from the vagina, followed by severe abdominal pain, a serous diarrhœa, and vomiting of a quantity of bile; on the following day labor was completed without difficulty and as the symptoms of the day before were attributed to the absorption of a small quantity of the mercurial salt, carbolic acid injections were used during and after labor. The mischief, however, had already been done, for, after exhibiting symptoms that pointed indubitably to mercurial poisoning, the woman died on the sixth day. The post-mortem examination showed spongy and swollen gums, ulcers on the tongue and pharynx, superficial ulcers in the ascending colon, and high grade of acute inflammation of the kidneys. Dr. Fleischman ends his communication in the Centralblatt fur Gynekologie with an impressive appeal to the profession to banish corrosive sublimate from obstetrical practice.

Urobilinuria.—Prof. Hayem recently read an article giving the results of his researches on urobilinuria. He demonstrated how, by the aid of the spectroscope, urobiline may be recognized in the serum of the blood and in the urine. According to him, the excretion of abnormal quantity of urobiline constitutes urobilinuria. This phenomenon may be transitory, or it may be intermittent, or it may present itself in a permanent manner. When the affection is slight, the color of the urine is scarcely altered, but when well marked, we have the hemaphetic urine of Gubler. Urobiline is found in the urine, either alone, or associated with a more or less considerable quantity of biliary pigments. It is frequently met with in intoxications, diseases of the liver, cerebral affections, and in certain chronic maladies. It is also frequently met with in the greater part of acute affections. Dr. Hayem does not believe that urobiline alone can produce jaundice. He had been able to establish, in all cases in which he observed urobilinuria, a venous stasis of the liver with slight catarrh of the biliary ducts, and with infiltration or fatty degeneration of the hepatic cells. According to Hayem the diseased liver, instead of secreting normal pigments, secrets urobiline, which, according to certain clinical facts, would pass directly from the biliary ducts into the blood. In conclusion, Dr. Hayem establishes the prognostic value of the symptoms of urobilinuria as follows: When temporary it indicates temporary modifications of the hepatic circulation. When permanent it indicates infiltration or fatty degeneration of the hepatic cells.—*The Journal of the American Medical Association.*

Red Wine in "Bed-Wetting."—In 1840, a professor under whom I studied in Baden, stated that the physician of an orphan and foundling asylum, where children were kept till they had reached their fourteenth year, cured night wetting of beds by red wine in two weeks. The wine was given at bedtime and in the morning before eating. Fifteen years ago a sixty-two year old man found himself unable to retain his urine more than five minutes. Recalling the red wine cure of the orphan asylum to mind, I gave him some home-made red wine (half blackberry, half elderberry), and he held his water for fifteen minutes, and then returned for a second dose. Subsequently he was able to hold his water for two hours during a jury trial. I subsequently cured the urinary incontinence of a fourteen-year-old girl with it, and later that of other children. In one case it is said to have failed, but, as the child's guardian was a fanatical spiritualistic prohibitionist, it is doubtful whether the child ever received the remedy. Two old men, one over sixty, one seventy-six, were cured by it. The dose given was for children one to four drachms, and for adults three ounces. The dose given at the orphan asylum was double this of pure wine (port), unobtainable here. A mixture of blackberry and elderberry wine is an excellent substitute. The remedy deserves a trial as it is certainly palatable.—*M. H., in Medical Standard.*

Creasote Treatment in Phthisis.—For many years Dr. J. Solis-Cohen has been using creasote in phthisis, not as a specific, but for the purpose of preventing a retarding decomposition of undigested nutriment in stom-

ach and bowels, and on the same principle in which he has been using it in chronic diarrhœa for more than twenty-five years. He always prescribes the beechwood creasote, and is usually supplied with the product from DUPONT'S gunpowder mills. The dose given is a half a minim three or four times a day, after meals. This dose is rarely exceeded. The creasote is given in a gelatine capsule, with powdered extract of licorice to give it bulk, and, according as the indications may demand, powdered digitalis, quinine, iron, or iodoform or any other drug required may be added. The formula most frequently prescribed by DR. COHEN reads as follows: Powdered iodoform, 30 grains; pure creasote (beechwood), 15 minims; powdered extract of licorice, sufficient to make a mass, which is divided equally into 30 parts, which are dispensed in gelatine capsules, of which one is taken three times a day after meals. Additional capsules taken in one grain of iodoform are supplied when it is desired to increase the quantity of that drug without increasing the amount of creasote. It is ten or twelve years at least since DR. COHEN has been using creasote in phthisis, alike in private hospital and dispensary work, and with such benefit to nutrition that he rarely prescribes either cod-liver oil or syrup of hypophosphites. —*Polyclinic.*

EUGENOL AS AN ANTISEPTIC.—Eugenol, a phenol-like compound, is insoluble in glycerin and water, and is obtained as a residue when oil of cloves is subjected to distillation with strong caustic alkalies. After the so-called light oil of cloves is distilled off, sulphuric acid or phosphoric acid is added, and by continuing without access of air, eugenol is obtained. Eugenol is an oily, colorless liquid, possessing the odor and taste of the oil of cloves to the highest degree. In contact with air and light it soon acquires a brown color; it boils at 247.5° C., and has a specific gravity of 1.078 at 0° and 1.063 at 18.5° C. Like phenol, which it resembles very much, it has no acid reaction, does not contain the group COOH. and also forms crystallizable compounds with alkalies. When heated with hydriodic acid, it evolves methyl-iodide, and when fused with potassium hydrate, it forms pyrotocatechuic acid, with baryta and tin-dust it forms about ten per cent. methyl-eugenol. When taken internally the greater part of it is eliminated by the urine, in which, however, it cannot be detected by its odor, not by distillation, but if allowed to decompose, the characteristic odor is at once perceptible, and when extracted with alcohol, shows the characteristic deep-green coloration with ferric chloride. Eugenol has been given in doses of three grams per day, dissolved in alcohol, and diluted in water. As an antiseptic, it is superior to phenol; as a febrifuge, it is not as efficacious as quinine, salicylic acid, antipyrine, or thaline.—*American Journal of Pharmacy.*

OIL OF TURPENTINE IN DIPHTHERIA.—ROESE, of Hamburg, treated 58 cases with a mortality of 3 (5 per cent.), as follows: oil of turpentine was given in teaspoonful doses three times daily; it was mixed with spirits of ether in proportion of four minims of ether to the teaspoonful of oil of turpentine. In addition a tablespoonful of a two-per-cent. solution of sodium salicylate was given every two hours; externally an ice-bag was used, and locally gargles of 1 per cent. warm solution of potassium chlorate. The results were:

1. Rapid diminution in pulse-rate and temperature.
2. The subjective symptoms were rapidly alleviated.
3. The duration of the illness was shortened.
4. An exacerbation of the local process was not observed after the first dose of oil of turpentine.
5. Danger of suffocation occurred but once, when tracheotomy was done.

ROESE considers pencilling the throat to be generally futile as done in private practice. He exercised great caution in pushing oil of turpentine in anæmic individuals and those having diseased hearts. Excessive heart action, from any cause, was carefully treated. The nourishment given was bouillon, old port wine and milk; to quench thirst ice and aërated fruit juices were used. No intoxication was observed. Paralysis occurred once, and recovery followed the use of potassium iodide.—*Therapeutische Monatshefte*, October, 1887.

FOR ACUTE RHEUMATISM.—The secret of mixing iron with salicylic acid without the formation of an insoluble precipitate has at last been discovered. The Medical News says that DR. GEO. L. PEABODY originated the formula, which is

℞ Acid salicylici, ʒ j.
Ferri pyrophosphatis, gr. v.
Sodii phosphatis, gr. j.
Aquæ, ʒ ss.

Misce. Sig. This amount to be administered every two hours until improvement justifies diminution in the frequency or until constitutional effects are produced. A ruby-red mixture is produced and the mixture may be said to agree as well with the stomach as any other, and it has the great advantage of not being followed, even if its use be long continued, by the severe anæmia that so often follows the use of salicylic acid, if it be given without iron. The combination is particularly serviceable in the treatment of acute rheumatism.

NASAL POLYPI.—DR. WM. R. BELL, in the Canada Medical Record, describes a new, painless and simple method of removing nasal polypi. His patient is instructed to blow strongly through the affected nostril while the other is closed with the fingers. With a hypodermic syringe he then injects into the tumor fifteen or twenty minims of a solution of tannin in water (twenty grains to a fluid drachm). In a few days the tumor shrivels, dries up and comes away without trouble or pain, the patient usually removing it with his fingers or by blowing his nose.

The Medical Age.

Vol. V. DETROIT, DEC. 10, 1887. No. 23.

Original Articles.

TREATMENT OF ANAL FISSURE AND HEMORRHOIDS BY GRADUAL DILATATION.

BY WILLIAM BODENHAMER, M. D., NEW YORK.

In the MEDICAL AGE, of August 25, 1887, p. 380, is a communication under the head, "Treatment of Anal Fissures and Hemorrhoids by Gradual Dilatation," and H. O. WALKER, M. D., in a paper published in the New York Medical Journal, July 30, 1887, presents five cases of anal fissure and hemorrhoids, "as illustrating upwards of fifty, he has treated by gradual dilatation, etc."

In his communication, DR. WALKER, says "Gradual dilatation is not spoken of, as far as I know, by any writer, as a means of cure in these cases." The testimony of DR. WALKER, in favor of gradual dilatation in such cases, is valuable, but this method is not of recent date as one might infer from what Dr. W. says, but has been practiced in just such cases by eminent men for many years, as I will now attempt to show. In my treatise on the hemorrhoidal disease, published by W. WOOD & Co., New York, in 1884, p. 226, I make the following remarks, under the head, *Gradual Dilatation:*

"The treatment of hemorrhoids by the dilatation of the anus and anal canal, by means of bougies gradually increased in size, was practiced many years before instantaneous or forcible dilatation was thought of for the same purpose. The bougie, as an efficacious local remedy in the diseases of the canal and orifice of the anus, was employed a century ago in Italy. Palletta thus briefly alludes to its use: 'Ma piu direttamente opereranno i locali remedii introdotti nell' ano: tra quali trovai protamente efficace una candeletta di cera spalmata di burro impastato con molta polvere di galla di quercia.' ("Instituzione Chirurgiche di Monteggia," parte tezza, sezione seconda, p 521, 8vo, Milano, 1805.)

In our own country, I find that compression and dilatation were successfully practiced for the cure of hemorrhoids by a physician of the State of Maryland in 1804. ("The Medical Repository," 2d Hexade, vol. I., p. 339, 8vo, New York, 1804.)

MR. COPELAND, of London, previous to 1810, successfully employed dilatation of the anus and anal canal by means of bougies in the treatment of numerous cases of hemorrhoids. He highly recommended the practice. ("Observations on the Principal Diseases of the Rectum and Anus," p. 67. Second edition, 8vo, London, 1814.)

MR. QUAIN also speaks in high terms of the use of dilatation of the anal canal by means of bougies in certain cases of hemorrhoids. ("The Diseases of the Rectum," p. 18. Second edition, 12mo, New York, 1855.)

I have for a number of years employed dilatation of the anus and anal canal by the use of bougies for the treatment of the incipient stage of the hemorrhoidal disease with good results. If judiciously employed at an early stage, before organized tumors have formed, it may prove the means of destroying the morbid condition of the vessels, and overcoming any undue contraction of the anal sphincters, and thus preventing the further progress of the disease.

For this purpose, besides using the English bougies, I have employed, as a bougie, my rectal exploring sound of different sizes.

The influence of the bougie in removing the morbid sensibility, and in relaxing the rigidity of the sphincters, as well as facilitating the return of the blood from the turgid, congested, and varicose vessels, is often surprising; and if torpor of the rectum and obstinate constipation obtain, which are not unusual in such cases, it soon induces a natural action of the bowels, an object so very desirable in such instances."

On page 228, I say: "The able and ingenious M. RÉCAMIER, of the Hôtel Dieu, of Paris, employed gradual dilatation of the anal sphincters and inferior portion of the rectum, by means of bougies gradually increased in size, in the treatment of anal fissure and hemorrhoids. He reports a number of cases in which this treatment was followed by complete recovery. (" Revue Médicale de Paris," Janvier, 1838.)

It is very evident from the observations of M. RECAMIER that he did not contemplate, by either gradual, instantaneous, or forcible dilatation of the anal sphincters, any rupture of the muscular fibres, or any laceration or tearing of the mucous membrane of the rectum, as some authors have attributed to him. M. MONOD, when discussing the subject of the forcible dilatation of the anal sphincters in anal fissure, and after explaining what he considered the *modus operandi* of M. RECAMIER'S

process to be, says that 'in it there occurs no rent of the mucous membrane, nor rupture of the fibres of the sphincters, but simply a modification, or a sudden change in the nervous state of the muscles, from which a momentary paralysis results, followed by the return again to the normal state.' ("De la Dilatation Forcée comme moyen de Traitement de la Fissure de l' Anus avec Constriction du Sphincter." 8vo, Paris, 1849.)

On page 233, I remark: "I do not believe that after regular, organized hemorrhoidal tumors are established, either gradual or forcible dilatation of the anal sphincters alone will, in the majority of cases, remove them entirely. M. VERNEUIL, the distinguished surgeon of Paris, was one of the ablest advocates for the treatment of hemorrhoids by the forcible dilatation of the anus; but in order to succeed, he was compelled in the largest number of cases, to combine with it the galvano-caustic method. The proceeding of VERNEUIL in such cases comprises two processes; first, the anal dilatation; and second, the intestinal cauterization of the tumors. According to the testimony of M. LARTISIEN, M. VERNEUIL for several years employed forcible dilatation of the anal sphincters, combined with the galvano-cautery in the treatment of hemorrhoids. ("Du Traitément Chirurgicale des Hémorroïdes, et de la Cauterisation intersti, en particulier, Thèse de Paris. 1873.)

M. GOSSELIN also employed forcible dilatation of the anal sphincters in the treatment of hemorrhoids. The cases, however, in which he used it, were, it seems, complicated with anal fissure; and it was doubtless more for the cure of the hemorrhoids that he employed it. ("Leçons sur les Hémorroides," 8vo, Paris, 1866.)

Hemorrhoids and anal fissure are two affections which often co-exist, and the theory of the French surgeons is, that when such is the case, forcible dilatation of the anal sphincters cure both diseases. I have shown, however, that their theory and their practice do not correspond."

In my treatise on Anal Fissure, published nearly twenty years ago, by W. WOOD & Co., in 1868, p. 115, I say: "When the fissure is accompanied by spasmodic contraction of one or both sphincters of the anus, the healing of the ulcer is more or less protracted in consequence of such constriction, which, although a mere symptom, is nevertheless a source of considerable mischief, as it occasions much additional pain by compressing the fissure and preventing the healing of it as rapidly as it would otherwise do. This spasmodic state of the sphincter ani muscles should therefore be overcome by treatment, in addition to, and separate and distinct from that of the fissure itself; not, however, by recourse to section of the sphincter muscles, according to M. BOYER, but by the milder, softer, and equally certain method of distending them. The object of employing distension of the sphincters, by either the bougie, the fingers, or tents made of various materials, is not only to produce relaxation of the constricted muscles, but also, by the firm pressure, to render them less irritable and consequently less susceptible of the sympathetic impressions of the fissure which are in reality the cause of the spasmodic contraction. If the dilatation is carefully and gradually made, I have always found that the introduction of the bougie, excepting the first time, is attended with but little pain. Every time it is inserted the pain is less. The bougie should not be used when the patient is suffering; better wait several hours after stooling, or just before the evacuation, when all the parts are in a quiescent state. For the purpose of dilating the anus and anal canal, I use the English rectal bougies, commencing with a number three. The bougie must be passed through the contracted portion of the canal, and immediately withdrawn; but it should not be so large, neither should the force be so great as to lacerate or rupture the mucous membrane or muscular fibres, this not being contemplated by the mild operation of gradual distention or dilatation. The gradual dilatation of the sphincters and inferior portion of the rectum if judiciously performed, is speedily followed by great relief, and ultimately by complete recovery."

On page 135, of same work, I say: "In cases in which the sphincters are powerfully contracted, the bougie must be laid aside, and a different method adopted. In such severe cases, the patient should always be first placed under profound anæsthesia, for the anal sphincters, in consequence of their functional activity in such cases, are, as a general rule, the last to relax or yield to the influence of anæsthetics. Instead of the thumbs, I then introduce into the anus the index finger of each hand, and forcibly dilate the contracted muscles; first, antero-posteriorly, and then laterally, at the same time taking care to preserve the integrity of the membranes."

THAT "UNUSUAL FORM OF TYPHOID FEVER."

BY MARSHALL KETCHUM, M. D., PALO PINTO, TEXAS.

I do not see anything particularly strange in the disease entitled "Unusual Form of Typhoid Fever," as expressed by DR. MULHERON, in the MEDICAL AGE, for Oct. 25th, and I have no doubt that every physician of any experience in the South is also familiar with it. It is the "Typho-malaria" of DR. J.

J. WOODWARD, and from all I have read and learned upon the subject I cannot understand why the name given by DR. WOODWARD is not a fit and proper one. I do not, by any means, stand alone in my opinion, and would be glad to see published in the AGE, the article on "Typho-malarial Fever," written by DR. E. J. WARD, and read before the Texas State Medical Association, for 1887," which discusses the matter learnedly and freely.*

In his article, DR. MULHERON, says: "Although the case was, without doubt, one of typhoid fever, it was peculiar because of the absence of prodromata, epistaxis, diarrhœa and rose-colored spots;" and again, "the fever onset is quite abrupt, and in violation of the old rule, that if the temperature reaches 104° within twenty-four hours after the advent of malaise, there need be no apprehension of typhoid fever."

I have been taught that true typhoid fever, with all that the name is meant to convey, is strictly a disease of Peyer's glands, and that epistaxis, diarrhœa and rose-colored spots, are the almost inevitable accompaniments; also, that any fever, either idiopathic or symptomatic will assume what is termed "a typhoid character," if it continues sufficiently long for the blood to become engaged in a process of decomposition. In Dr. M.'s case it appears the principal symptoms present, were dusky hue of face, teeth covered with sordes, and a little tenderness and gurgling in the iliac region. I do not see why a protracted fever with these as the prominent symptoms should be classed as any form of typhoid. This is not a typhoid condition; but simply symptoms resembling those of typhoid, and the result only of high temperature, with no connection with the specific poison of typhoid fever. I do not question the fact that a true typhoid condition will not be developed later on, say, when the primary cause has almost exhausted its course, but even such cases, I believe, are comparatively rare.

Now in regard to the treatment, I beg a little indulgence, and trust the worthy doctor will kindly bear with me if I show the assurance to suggest a treatment differing from his. This disease, like every other, cannot be treated by name, but by symptoms. I must quote a little from Dr. M.'s article, as I go along. He says: "When first called, the unpracticed physician invariably resorts to quinine, and is very apt to predict recovery in a few days. After he has seen several of such cases, he becomes very guarded in his expressions of opinion as to the course of the attack. The exacerbations of the fever occur daily and are not perceptibly affected by quinine, even when pushed to the production of the characteristic head symptoms." Now why should the unpracticed physician, or anyone else for that matter, resort to quinine the first thing? Because, I take it that he has been taught the pernicious system of associating the two—fever and quinine, quinine and fever—regardless of any other condition of the system. My voice I know is feeble, but I want to state, right here, that this plan of giving quinine, regardless of the temperature of the patient, or after it is a settled fact the fever is a continued one, is a sad mistake. Quinine, like any other good medicine, has its time and place, but to pour it into a poor bed-ridden patient with any form of continued fever, is wrong. Why is it that it is so given? Does it cut short the disease? Not a bit. Does it lower the temperature to any appreciable extent and thereby render the patient safer and more comfortable? Not at all; but it causes irritation of the stomach and nervous system, upsets digestion, making it almost wholly impossible for the patient to take the most delicately prepared food to any advantage, or to sleep at all. Another thing this continuous quinine treatment does: Examine a patient who has taken quinine continuously throughout a protracted spell of fever and you find his sense of hearing greatly impaired, and the nervous system in a sad state. I have in mind a young man, lately from Kentucky, who about two years ago passed through a three weeks' spell of fever, with, as he said, "two of the best doctors in the country to attend him," and during that time he took one and one-half ounces of quinine. What is the result? To-day his nervous system is in a state of hyperæsthesia which renders him uncomfortable at all times and almost upsets him for his business as teacher in public schools. This is not an exceptional case. The use of quinine in doses of one-half to two grains, every 4 or 6 hours, for its tonic effects, in the latter stage of a continued fever is eminently fit and proper, and will do much good, generally.

DR. MULHERON cites a case which I beg leave to follow. On August 5 the young lady had a chill followed by a temperature of 104° immediately, and although she was in considerable distress, his only ℞ was a six-grain dose of calomel. There is, perhaps, no particular objection to that, and we will say it was all right as far as it goes; but to my mind it does not go far enough. Here the special sedatives were at once indicated, viz.: aconite, gelsemium, veratrum and belladonna, either singly or combined, according to the most prominent symptoms calling for their special use. He also left a ℞ for five grains of quinine to be given the patient at 5, 7 and 9 o'clock next morning. At this stage, if there is any ten-

*[At DR. KETCHUM's suggestion we publish in the present issue of the AGE, DR. WARD's paper which will be found to be not only of timely interest, but of much inherent worth. ED. MEDICAL AGE.]

dency at all toward a complete remission of the fever, this will usually effect it. If not, it will do no particular harm, if no more is given. On the next day, with a morning temperature of 100°, 2½ grains of quinine were given every three hours. What for? I cannot conceive, as a dose that small wouldn't have any particular effect either one way or another, except perhaps as a stimulant, which is demonstrated by the fact that on the next day the temperature has increased to 101° in the morning, with lumbar pains and aching limbs characteristic of the fever. I presume the quinine is continued, as nothing is said about it. The evening temperature on the same day is 103°, with ringing and roaring of ears continued, as on the previous day, caused by the quinine. Here twenty drops of hydrobromic were given every two hours, ostensibly to relieve the distressing effect of the quinine. This same night the patient becomes slightly delirious, and the morning temperature is 101½°, increasing, brown streak on tongue and no movement of bowels since first day. Liq. ammon. acetatis is now prescribed every three hours. On the next and fourth day, the morning temperature is still 102½°, the face has taken on a dusky hue, sordes on the teeth and hebetude more marked; also dry cracks have taken the place of the fur upon the tongue. No further treatment is mentioned as the case progresses and slow recovery begins after the sixteenth day. That patient was fortunate in having a good constitution.

I have not followed the doctor's treatment so closely in order to make a personal criticism, but simply to draw attention to the fact that this somewhat routine treatment which is being followed by so many, shows the fallacy of treating diseases by name instead of symptoms. From first to last I do not see that anything was done, therapeutically, to render the patient comfortable, nor any attention paid to the special and prominent symptoms other than observing them. On the evening of the third day the tongue was heavily coated with a white fur. Does this pass for naught? It seems so in this case. Sometimes this impairment of vital power is all the change that can be noted, retrograde metamorphosis progressing more slowly than in health. The influence of the zymotic cause of the disease is shown and the remedy indicated in an antizymotic. Hyposulphite or sulphite of soda is the remedy if an alkali is indicated by pallid mucous membrane, or sulphurous acid, where the case presents reddened mucous membranes. Sulphurous acid, like the alkaline sulphites, antagonizes zymotic causes of disease. Remedies to act as a gentle stimulant to the digestive tract were no doubt required, as well as alcohol during the last few days.

These are my thoughts, hastily written, after reading DR. MULHERON'S article, and I trust they may be kindly received and a place given them in the journal.

TYPHO-MALARIAL FEVER.*

BY E. J. WARD, A. M., M. D., WAXACHIE, TEXAS.

The subject which I have selected to bring under your notice to-day has been so often and thoroughly discussed that I fear you will regard no excuse as sufficient to warrant me in obtruding it upon you, short of the presentation of some new facts bearing upon it. I warn you in the outset that I have no such facts to offer.

But it was my good fortune to have intimately known the learned and distinguished physician, DR. WOODWARD, who first proposed the name typho-malarial fever, having worked for nearly ten years in his laboratory, and hence had ample opportunity to know what his views upon the subject were. Perhaps, therefore, you will indulge me, now that his eloquent pen has been laid aside, and his silver tongue is forever silent, in a brief statement of his views in regard to this hybrid fever and also to refer to the reasons which to my mind establish the correctness of those views. It is given to a few men to rise to that eminence in their chosen callings, that their very names give strength to any subject receiving their endorsement. Such a man was JOSEPH JANVIER WOODWARD. BYRON said of CRABBE, that he "was nature's sternest painter, yet the best." And it may be said of WOODWARD, that he was nature's sternest interpreter, and if not the best, he was at least a master. And were it not for extending this paper to unreasonable length, I could make no stronger argument in support of his nomenclature than to make you acquainted with the character and acquirements of the man; to lay before you the vast sources of information, clinical, anatomical and bibliographical, from which his knowledge of the subject under consideration was drawn, and the earnest, unbiased, long-continued investigation he gave to it before publishing his views, and in his "outlines of camp diseases," later in maturing them for republication in his masterly work on camp fevers, which unhappily was left unfinished by the author's untimely death. It is not too much to say that he knew more about this subject than any other man, living or dead. And yet, notwithstanding his superior knowledge of the disease, and his extensive opportunities for investigating it; notwithstanding the fact, that his nomenclature and his opinions were approved and adopted by the most learned and august body of medical men that ever assembled on this continent, he has not

* A paper read before the Texas State Medical Association.

escaped severe criticism, and even ridicule, in certain quarters. The opposition to his views has been divided; one party denying the dual nature of the disease, and the other admitting it to be a hybrid, but opposing the name. But if it can be shown that the disease is a hybrid, presenting the clinical features of typhoid and malarial fevers and caused by the coexistence of the two pathogenic factors, which separately produce typhoid and malarial fevers, then it would seem to be difficult to find a more appropriate name than typho-malarial fever.

That such a fever does exist in localities where malarial and typhoid fevers are endemic, rests upon irrefragable testimony. Many of the old masters in medicine, VAN SWIETEN, HEUXAM, STOLL, SYDENHAM and others, had observed that certain cases of typhoid fever presented strongly-marked malarial symptoms which led them to believe that remittent actually changes into typhoid. TROUSSEAU pointed out the fallacy of his teaching, but fell into an error equally as grave, and, viewed in the light of more recent researches, far less excusable. He believes that true typhoids often begin as intermittents and inversely, that undoubted intermittents sometimes begin as continued fevers, simulating typhoid. In describing a case of the former type, he says:

"At first there is a paroxysm of fever once in two days, then it occurs daily, or the type becomes double tertian, as in the case of the woman in bed, 26; then the fever, in place of being intermittent, is remittent, and so by degrees assumes the continuous type with which at last it is completely invested. From the beginning, the case is so absolutely dothinenteric and so removed from the nature of an intermittent, transformed into a continued fever, that if the patient were to be carried, about the seventh or eighth day by an accident, before the disease had become invested with its own external characters, the specific lesions would be seen at the autopsy *

Here TROUSSEAU describes just such a case as WOODWARD might have selected to illustrate the duality of the disease. "TROUSSEAU will not see anything in it, however, but what is absolutely dothinenteric. He believed that an autopsy would have revealed the characteristic intestinal lesions, and this satisfies him that the case is dothinenteric *per se*, and hence, that the periodicity noticed at the onset of the disease and for several days thereafter was but a caprice of the typhoid invasion." He takes for granted the existence of the typhoid lesions. But it is in precisely such cases as the one here pictured, that WOODWARD has demonstrated the non-existence of the lesions supposed by TROUSSEAU to be pathognomonic of typhoid. In speaking of autopsies made in this class of cases, WOODWARD says: "I have collected a number of autopsies of cases of this kind in which diarrhœa had been present during the attack, and in which after it has assumed the continued type, it had strikingly resembled typhoid, but in which dissections showed no other lesions in the alimentary canal than a smart intestinal catarrh, patches of inflammation scattered irregularly throughout the large and small intestines and enlargement of the closed glands, often associated with pigment deposits, were the characteristic lesions.

The solitary glands of the small intestine appeared as little projecting tumors the size of pin heads, which often had constricted necks, so that they resembled tiny polypi. The agminated glands of PEYER, slightly prominent, were the seat of pigment deposit, which gave them the so-called shaven beard appearance. Sometimes the villi of the small intestines were hypertrophied; sometimes they had pigment deposits at their apices; in the large intestine the slightly swollen solitary glands were often the seat of pigment deposits, seated either in the glands alone, or sometimes also in the surrounding mucosa, in which the central dot of pigment was surrounded by a little pigmentary ring. * * * Great enlargement of the spleen and congestion of the liver, with or without fatty degeneration, were frequent concomitants. The condition of the intestinal canal in these cases closely resembled that which has been emphasized by RODERER and WAGLER, and by DICKSON. Between the simple inflammatory enlargement of the closed glands, which I have pictured, and the more luxuriant process which occurs in ordinary typhoid fever, and which most pathologists believe to be the specific lesion, every possible transition existed. I, for one, confess myself unable to draw a line between the two conditions. Anatomically they appear to pass into each other by insensible gradations. The essential element of both is the accumulation of a swarm of migrated white corpuscles, in the closed glands, in the surrounding lymph passages and the adjacent connective tissue associated, doubtless as we must infer from the study of other inflamed tissues, with multiplication of the lymph cells of the parenchyma of the closed glands by division, though it is difficult, if not quite impossible, to demonstrate the latter phenomenon in the present case." (Transactions International Medical Congress, Philadelphia, 1876, p. 331.)

It should be borne in mind that, at the time WOODWARD wrote, the migration theory of inflammation held almost undisturbed sway among medical men. His paper was read eleven years ago. What changes those eleven years have wrought in pathology! Since then the migration theory has fallen. (In saying that

* Lectures on Clinical Med., vol. 1, p. 270, Philadelphia, 1873.

the migration theory of inflammation has fallen, I would not be understood as denying, with WHARTON JONES, the diapedesis of the white corpuscles, but merely that their migration does not play the important role in inflammation assigned to it by CONHEIM, and his followers). And not only have we another way of accounting for the corpuscular or cellular accumulation in the closed glands and adjacent connective tissue, upon which WOODWARD lays so much stress, but we look beyond these anatomico-pathological phenomena, for the "essential element," as WOODWARD calls it, in these cases.

But whether the characteristic lesions were present or absent, the clinical picture drawn by TROUSSEAU shows an intermingling of typhoid and malarial fevers. This is perfectly plain, without taking into consideration the significant fact that the patient has resided in a malarial district to within a short time of the febrile attack. But TROUSSEAU'S picture is incomplete. The greatly enlarged spleen, swollen belly, icteroid skin, large tongue, and intestinal pigmentation, no doubt existed in the case he described, for they were found in all such cases during our late war, varying in proportion to the intensity of the malarial intoxication. But the great French teacher further strengthens WOODWARD'S position; I may say, indeed, establishes it. "It is," he says, "particularly in districts where marsh fevers are endemic, and in persons who have not long been absent from such localities, that we see dothinenteria begin by showing the intermittent type. We had an example of this in a woman, who presented at the beginning of the fever symptoms similar to those experienced by the patient who occupied bed 29: she had lived for a long time in a district where intermittent fevers were always prevailing. Change in the type of fever, also, occurs in an inverse order, and it is likewise in places poisoned by emanations from marshes that this is observed. A true marsh fever, which has at the first shown itself with the continued type, and has simulated dothinenteria, soon assumes the regular intermittent type, and, as the case advances, becomes tertian, double tertian or quartan." (Ibid.) Now had TROUSSEAU made an autopsy in a case like the one last described, he would have found exactly the same lesions as existed in the case first alluded to, the presence of which satisfied him that the case was one of typhoid. In both cases the combined influence of malaria and the causative factors of typhoid (whatever they may be) can alone account for the train of symptoms described; the preponderance of one or the other of the pathogenic factors determining the peculiarities of each case. But this faithful and acute observer, before leaving the subject, makes the following statement, than which nothing could be more to the point: "A case of marsh fever which, at the beginning, was a strongly marked intermittent, may become continued, though it is not a frequent occurrence, just as a marsh fever may at first be continued and soon assume, in a well marked manner, its own intermittent type. Cases collected in the French possessions in Africa (where our military physicians have elucidated this important subject) have conclusively shown that marsh fevers undergo these changes of type." (Ibid.)

It is a significant fact that it was left to the "Military physicians in Africa to elucidate this important subject," for there the same conditions obtained as existed in the swampy districts in which the contending armies campaigned during our late war, and which afforded WOODWARD his splendid opportunities for the further investigation of this destructive hybrid. The observations of TROUSSEAU were limited to cases in which the malarial influences were of a mild type; but had he seen samples of typhoid fever complicated by intense malarial intoxication, such as the French physicians encountered in Algiers, or that the American surgeons found on the Chickahominy, and in other intensely malarial regions; cases in which the malarial phenomena sometimes preceded and at other times followed the typhoid manifestations, and others still, in which the febrile exacerbation and remissions presented during the entire attack, the quotidian, tertian, double tertian or quartan type, I am constrained to think that this great clinician would have recognized the dual pathogenesis of the disease. But it will be objected that the fever curve of typhoid is subject to so many variations that it possesses little or no diagnostic value. This objection is not without force, but the same objection may be raised to all of the other symptoms presented in cases of typhoid fever. It may be positively affirmed, however, that typhoid fever occurring in non-malarial localities, never shows the peculiar fluctuations of temperature just mentioned, except when the subject of the attack is recently from a malarial district. The ideal fever curve of typhoid, if I may use that expression, in which the fever runs its course with almost mathematical precision, is rarely if ever seen, and yet it may be asserted that in all cases of uncomplicated typhoid, this curve is approximately maintained, and that in any case, where there are any marked departures from the classical thermometric range, the physician may justly conclude that he has to deal with a fever other than typhoid, or else a typhoid complicated by some other disease. I am aware that this is debatable ground; that many able physicians, whose opinions are worthy of the highest respect, place typhoid, typho-malarial and simple continued fevers in the same category; I can but regard as unfortunate this grouping of these

three affections (as I consider them to be) under one head.

It is an easy method of removing difficulties of diagnosis, or rather of getting around them, but it is unsatisfactory to the clinician and confusing to the medical statistician. Simple continued fever is lacking in so many of the characteristic symptoms of typhoid, that the line drawn between the two affections by the older writers seems altogether justifiable, and it appears equally clear, that typho-malarial fever, is typhoid fever plus malarial fever, or *vice versa*, and that the recognition of it as a hybrid, is of the highest importance. Obviously the civil practitioner will see far less of this mixed fever, than the military physician, yet there is probably not a practitioner of experience to be found, who has not met with cases in which the intermingling of the two fevers was plainly recognizable. The veteran DR. N. S. DAVIS, than whom no more competent and painstaking observer can be found, in discussing DR. WOODWARD, before the section of medicine of the International Medical Congress in Philadelphia, 1876, said: "This phenomenon of the intermingling has been familiar to me ever since I first took up my residence in Chicago, in 1849. Then it was almost universally believed that our fevers were of a malarial character; very few recognized typhoid fever as such. The locality was highly malarious. The population was about 30,000, and there was not a foot of sewerage. The supply of water was drawn from superficial wells, and the prevalence of intermittent and remittent fevers was very distinct. Ten or twelve years later, when sewerage had extended and a supply of lake water had been supplied the intermingling was observed. Cases of fever were regarded at their outset as malarial, but not yielding to the influence of quinine, were ultimately recognized as of a typhoid character. As time passed on, the typhoid element predominated, and we now find no difficulty in recognizing the intermingling of types."

DR. EASTLANDER, of Finland, in the same discussion, stated that during the wet seasons, in that country, the typhoid fevers were uncomplicated, but in dry seasons, when the bottoms of the creeks and bays along the southern coast were exposed to the rays of the sun, the malarial fevers were very prevalent, and he says: "At such periods, when the malarial fever is very intense, we often see cases like those so well described by DR. WOODWARD. * * * DR. WOODWARD has named this form of fever, typho-malarial, to define it as a hybrid of the typhoid and malarial fevers, and I gladly accept this name and its signification." DR. WILLIAM PEPPER, of Philadelphia, DR. SCOTT, of Ohio and DR. ROBERTS BARTHOLOW, then of Ohio, all expressed substantially the same views as DRS. DAVIS and EASTLANDER. DR. BARTHOLOW, as is well known, had previously severely criticised DR. WOODWARD'S nomenclature, but in the discussion just alluded to, he admitted the blending of typhoid and malarial fevers, but said that he understood DR. WOODWARD to teach that the hybrid resulting from this blending was a distinct and specific disease. I need not say to you that DR. WOODWARD never taught any such thing. The following motion, made by DR. WOODWARD, and adopted, as expressing the sense of the Section of Medicine, defines DR. WOODWARD'S position:

"Typho-malarial fever is not a specific or distinct type of disease, but the term may be conveniently applied to the compound forms of fever which result from the combined influence of the causes of malarious fevers and typhoid fever." This motion expresses just what WOODWARD taught in his earliest writings upon this subject. Admitting, as proven, that the disease under discussion is a hybrid, as I think we must, is typho-malarial fever a proper name for it? It seems in every way desirable that a fever of such importance and of such common occurrence, and one so well-marked in its clinical features, should have a name by which it may be known. The late DR. GEO. B. WOOD objected to the term typho-malarial, and suggested as a substitute entero-miasmatic. This is, I think, open to a twofold objection. The first part of the name gives undue prominence to the comparatively unimportant and not invariably constant enteric lesions, while the only claim the latter part of the name has over its Italian synonym is its Roman etymology, while it has the disadvantage of having been used in a much more vague and indefinite way than the word malaria. The mere matter of nomenclature, whilst of far less importance than the recognition of the disease it is intended to designate, is far from being unimportant. Erroneous nomenclatures, the result of mistaken notions of pathology, have led to much confusion, and in many instances has, no doubt, retarded clinical research and therapeutic progress.

An example of this may be found in the grossly exaggerated importance given to the intestinal lesion of typhoid fever, even by many physicians of the present day, and which is probably chargeable to the ill-chosen names, Entero-mesenteric, Enteric-dothinenteria, Mucous fever, Synochus putris, Abdominal typhus, etc., which have been given to this disease. A partial renovation of the nomenclature of diseases, which for a long time has been regarded as desirable, will probably be rendered absolutely necessary by the advances that are being made in bacterial pathology. The microbic etiology of the two diseases, of which typho-malarial fever is

compounded, may now be regarded as established. I do not mean that the causal microbes of typhoid and malarial fevers are produced by a micro-organism, whether known or unknown. And it is worthy of notice that Woodward, who was an opponent of the germ theory of disease (he died before the greatest triumphs in this department of pathology were achieved), should have selected for this hybrid a name which will probably need no emendation, when our knowledge of its pathogenesis is complete. The terms malaria and typhoid have been so long employed, that it is altogether probable, that whatever microbes may be found to be the *fons et origo mali* of these diseases, they will receive names that will associate them with the familiar terms. That the name typho-malarial fever has been grossly misapplied, is no argument against it. I have known it to be applied to remittent, simple continued, and to uncomplicated typhoid. Almost the only fever occurring in the section of country in which I practice, is simple continued; a fever that rarely presents any of the prominent symptoms of typhoid, and yet it is very generally diagnosed as typhoid or typho-malarial. That typho-malarial fever must be comparatively rare in most sections of country is evident, for it cannot be often that the two causes of the hybrid co-exist. In most places where malarious fevers prevail to any great extent, typhoid is but rarely found; and malarial fevers are, as a rule, uncommon, where the conditions favorable to the development of typhoid exist.

Typhoid shows a partiality for northern latitude and increases with the growth of population. Malaria, on the other hand, finds its home further South, and declines with the increase of population. The means by which the contagion of typhoid is spread, multiplies as the population of towns and cities increase. Whereas, the drainage and other sanitary reforms necessitated by the crowding of population, tends to stamp out malarial fevers. Hence it is exceptional, in many parts of our country to find a case of typho-malarial fever, except in those subjects who have recently removed from a malarial district to one in which typhoid is endemic, or where large numbers of people are suddenly thrown together, or where places are undergoing the transition from malarial to typhoid localities; a typical example of which is to be found in the sanitary history of Chicago, an epitome of which, by DR. N. S. DAVIS. I have already quoted. It is true that the autumnal typhoids are frequently complicated, to some extent, by malarial influences, and it is a matter of common observation, both in Europe and America, that there is a marked departure from the ordinary fever curve, in a large percentage of the typhoids, occurring at this season. The mortality is also higher in the typhoids of Autumn, but it is not often in these cases that the strongly-marked malarial symptoms are seen, and the propriety of classing such cases as typho-malarial is questionable, at least. It would be better, from a practical point of view, to restrict the use of the term to those cases in which the malarial infection is of such intensity as to markedly confuse the ordinary typhoid picture. Used in this restricted sense, and with the understanding that the name is not intended to designate a specific disease, but merely an intermingling of the causes of two diseases, it is a term of great practical convenience and importance to the military physician, to the general practitioner and to the medical statistician. Or, to use the language of the lamented AUSTIN FLINT, SR., whose great learning, wise conservatism and long experience constituted him at once the Nestor and the Ulysses of American medicine:

"The general favor with which the term typho-malarial has been received, and the readiness with which it has come into vogue, show that it expresses a pathological doctrine consistent with clinical experience." *

A WELL-NIGH FATAL CASE OF CHLOROFORM NARCOSIS.

BY H. R. RANDALL, M. D., WINONA, MINN.

On the 26th of November, I received a note from DR. WAHL, requesting me to call immediately at a certain house and bring chloroform. Responding at once, and arriving at the house, I was introduced to the patient, Mrs. P., a robust woman of good physique, apparently accustomed to health, and aged 21 years. She gave the following history:

Menstruation which should have taken place three weeks before, did not occur. She had observed no other symptoms of pregnancy and had been in good health until the evening of November 22nd. At that time she was seized with bearing down pains which had been partially controlled by opiates until the present time. There had been occasional escape of blood clots from the vagina—those which last escaped, having a fetid odor.

Examination revealed an enlarged uterus reaching to within about two and one-half inches of the umbilicus, filled with blood and the partially decomposed products of gestation.

It was proposed to anæsthetize the patient and empty the uterus. She had previously taken chloroform upon four different occasions with no ill effects. Though the pulse was only 60 per minute, it was full and strong, and careful examination revealed no contra-indication to the use of chloroform.

* Memoirs U. S. Sanitary Com., N Y., 1867, p. 214.

The patient, clad in nothing but a loose dress, was placed on a table in recumbent posture and the anæsthetizing was begun. After about five or six deep inhalations, breathing suddenly ceased. A hasty glance showing that the tongue was not obstructing the air passage and the pulse continuing strong I removed the cone and awaited a moment the resumption of respiration, when, without any warning, the countenance undergoing no change of color, radial pulsation suddenly ceased.

The patient was immediately drawn over the head of the table, and while the head was hanging down we attempted artificial respiration alternately elevating the shoulders and then lowering them and compressing the chest. But there was neither pulse nor respiration, the patient continuing limp and apparently lifeless.

The outside door being near by was opened, admitting air at a temperature of about—10° F. Seizing the patient I carried her to the doorway and threw her backwards over my knee her head hanging down to the floor. Then as we slowly raised her shoulders she emitted a low respiratory groan,—and then the rest of us breathed too. Following this up with ammonia, flagellation with a wet towel, etc., she was soon beyond all danger.

Respiration was suspended probably as much as two minutes; the pulse about fifteen or twenty seconds less. The operation of emptying the uterus was performed under morphine and the patient is now almost well, having had no untoward symptoms.

The above adds one more to that immense catalogue of cases which illustrates the dangers of administering chloroform even when no contraindications to its use can be discovered previous to its exhibition; but as a case of restoration from chloroform narcosis, in which heart failure has been preceded by suspension of the respiratory function, it is, doubtless, one of a comparatively small class.

Correspondence.

SHALL WE REGULATE THE PRACTICE OF MEDICINE BY LAW?

The article in the AGE of November 10th ult., by J. V. STEVENS, M. D., of Prairie du Sac, Wis., must sound to every true physician as a plea for quackery. Perhaps the doctor did not so intend it, but many of the statements contained therein are certainly such as to convey that impression, and are at variance with the spirit of the age, as pertaining to the true physician, as well as palpably void of argument.

In the first place, in regard to the medical bill for the regulation of the practice of medicine in this state, which was before our legislature last winter. To this he refers, by saying that it was defeated because of the almost unanimous protest of physicians of all schools. I beg leave to deny the assertion. There were many other reasons why the bill was defeated, two of which I mention as having more force than others. Of course, we do not deny that the bill had its objectional features, but the homeopaths opposed it bitterly because it did not, as they claimed, give them chances with the regular school.

The second great reason why it was opposed, was the fact that it aimed at reform, the same reason that has always stood in the way of progress everywhere.

As DR. MULHERON says in his editorial in the AGE, April 25, "the bill fails to deal with the question which, in our opinion is the *fons et origo* of the evils which it is calculated to correct. It accepts the diplomas of medical colleges as a guarantee of the fitness of their possessors to practice medicine." Those who opposed the bill on these grounds, did so because it did not seem to reach up to the urgent demand of the age in the regulation of the practice. Men who opposed it for these reasons are generally ready to accept of legislation no matter how rigid its demands, and we are not to suppose that men who have been so thorough and rigid in their own preparation, have done so, or require the same in their brother practitioner, from a purely selfish standpoint, as DR. STEVENS would have us believe.

What a grand condition of society would we have if the members of our grand and noble profession were as hypocritical as DR. STEVENS implies, when he asks "Why should physicians be so anxious to protect the 'dear people' when they (the 'dear people' I presume he means) are satisfied as it is? I strongly suspect that a great many of the supporters of these measures are fully as selfish as philanthropic and do not relish the success some of these illiterate M. D.'s are having in combatting disease in their locality and thus dividing the dollars with them?" I think the history of the medical profession will prove, and any person who reads and will honestly express a candid opinion, will concede, that no class of men have been more unselfish in their efforts to alleviate the sufferings of humanity, or elevate and better the conditions of human society than physicians; grand, heroic examples of self-sacrifice are made every month and year for the welfare of ignorant, unprotected human beings, and any number of examples can be cited. The medical profession has made itself renowned by its untiring, unselfish devotion to the needs of suffering humanity, and any one who can stand up boldly and affirm, as DR. STEVENS has done in his article, that the motives which prompt medical men to

agitate reform, or seek the good of the profession by legal enactments, are selfish, and their show of philanthropy is thus to be called in question, can certainly congratulate himself on the possession of plenty of cheek, but can boast of very little wisdom, or even charity for his fellow men. Of course men may have questionable motives sometimes, but to make a bold unqualified statement as the doctor has done, is certainly worthy of criticism.

But the question at issue, whether prompted by honest or dishonest motives, remains the same, and in the light of the present age, especially in this proud State of Michigan, where the public school system boasts of completeness, and where light and wisdom shine upon every hill-top, and where the law demands a reason for action in school-teacher, lawyer, dentist, and druggist, who can deny that some means should be adopted by which a profession so responsible as that of medicine should be regulated? and who can devise any other way than by legislation? I think, on careful, candid, reflection that all must be forced to acknowledge the urgency of the demand, and when a professional M. D. comes out in condemnation of the men and methods sought in carrying on this work; when he even goes so far as to condemn the agitation of regulation from year to year, and without reason or common sense seeks to impugn the motives of the medical profession, it can be safely set down that there is something fearfully wrong in that man's make-up or education.

It doesn't look well in any man, especially a "self-styled, modern physician," to attribute a dishonest motive to men who would hail a better day for medicine and a greater good to the people, no matter how much it might interfere with themselves. That which seeks the greatest good to the people, and must also redound to the benefit of the profession, is to be hailed by all true men; if it cuts such men as you and me out of the profession, so much the better, for if we are unworthy to remain there, we ought to go. The grand profession to which we belong is amply worthy of demands as high as these.

Dr. Stevens asks, "What guarantee can we have that these boards will be any more capable or incorruptible than the faculties of medical colleges? Is it consistent with American liberty to compel a man to be dependent upon a few interested persons in a State to say whether he shall have the right to enter that State and engage in the pursuit of happiness by honestly trying to earn a livelihood as a doctor? Did the possession of theoretical knowledge of itself ever make a good doctor, or knowledge of books alone make a teacher, or lawyer, or pharmacist, or preacher?" Now, I am, and no doubt hundreds of medical men all over the country are sorry to see such deplorable stuff coming from one who signs himself M. D. Just such arguments (?) as these are the curse of the age, and are more effective in their influence against reform than they deserve to be. Does Dr. Stevens say it is unconstitutional to require an examination of the teacher in our public schools by a "few interested persons?" Does he affirm it to be wrong, and an infringement of personal liberty, to require candidates to go before a board appointed by one man (the Circuit Judge), who shall examine the candidate and say whether or not he shall become a member of the bar? Is it the doctor's opinion that there's anything criminal in requiring druggists and dentists to subject themselves to a rigid examination by a regularly constituted board, which every one of them must do in this State, unless he can produce proper credentials for his authority to practice? I would like, also, to ask the doctor, what is the reason that hundreds of quacks crowd themselves into our State just as soon as one of the adjoining States enact some law of protection against these suckers? And why is it that every winter that these bills seeking to regulate the practice in this State are before the Legislature, these fellows hold themselves in readiness to skip just as soon as such law shall come into force? Men who are up with the times, and have been faithful in preparing themselves to practice, no matter whether old or young, or where they may have gotten their preparation, whether at home by their own fireside, or in one of the most popular medical colleges, do not usually sustain the relation of quack to our profession, and nobody wants to deny that there are some old men in our ranks who, be it said to their credit, have kept pace with the age, and who to-day, while they may not have seen the inside of a medical college, are living epistles, and sparkle with brilliancy in thought and speech. But how many men of this kind do not actually stand in the front ranks for reform? Such men are bright enough to see the necessity of, and are aggressive enough to fight for, reformation.

I wish, in conclusion, simply to refer to one more of Dr. Stevens' last sentences viz.: "Let us trust that a discriminating public will refuse to employ those not prepared or worthy and thus compel the right ones to abandon our noble profession." Dr. Stevens must be as he admits, a young doctor; he must be very young, without experience, or else he lives in a locality, the duplicate of which for enlightenment and well-educated people, etc., etc., is not to be found in Michigan. Either this, or else his credulity leads him to the exercise of greater faith in humanity than most of us can have who have times without number seen people to whom we gave credit for some degree of intelligence, trotting off like sheep to the slaughter, after the most flagrant quacks who

sound their own praises in the columns of the newspaper.

Perhaps DR. STEVENS has none of these fellows to deal with over in Wisconsin. One thing is certain, and I think my medical brethren of the State of Michigan, will bear me out in the statement, that if medical men wait until this enlightened "discriminating public" bring about reform and protection they will forever, like willing slaves, take up their burdens and plod along in the rear, while this festive gang of regaliaed quacks will continue to gull and deceive this "discriminating public," and put their wealth into fine properties, and flaming handbills covered with lies, but swallowed down with no compunctions whatever by the "discriminating public."

FRED R. BOYD, M. D.

CEDAR SPRINGS, Mich.

A FEW NOTES ON THE THERAPEUTIC ACTION OF CERTAIN DRUGS.

Euphorbia Pilulifera, Fluid Extract, was tried by me during 1885, in a very obstinate case of asthma, with associated bronchitis and emphysema. The first effect was a seeming triumph over the symptoms, but nothing, in this case, so availed as potassium iodide, tincture lobelia and potassium bromide, with tincture columbo as a vehicle. Euphorbia pilulifera seems to be narcotic, and it is capable of good in uncomplicated cases. No further trial was made with the drug.

Grindelia Robusta, has upon trial been found very trustworthy in capillary bronchitis occurring in children.

Boldoa Fragrans, is a drug whose only disadvantage is its nauseousness. I have employed it with most gratifying results in cases of atony of digestive organs, debility, neuralgia and ague cases. In these last no combination has succeeded as:

℞ Boldonis fragrantis, fl. ext., (P., D. & Co.) ♏xlviii.
Sol. Fowleri, ♏xcvi.
Tinct. nuc. vom., ℥ ss.
Alcohol dil., q. s. ad. ℥ j.
M. Dose, gtts. x.

Stigmata Maidis, I have found inferior to other drugs employed in the same sphere. Buchu serves me well. I do not claim to have tried it but in a very limited number of cases.

Perhaps it may be truthfully said that a physician's greatest embarrassment not unfrequently lies in the richness of his therapeutic resources, an embarrassment he can overcome, however, by successive trials of other drugs, with asserted claims and similiar range of action. I have frequently heard Stigmata Maidis spoken of lightly. I am personally acquainted with a man who has a diseased prostate and irritable bladder, and he uses a tea made from dry corn silk, obtained from his corn crib. He gives the remedy great praise, and I am of that opinion that a green-drug extract of corn silk has demulcent properties of great value in these prostatic and bladder ailments, so common and almost universal among old men.

Rhus Aromatica is deserving of great praise as a remedy in nocturnal incontinence with children. In my hands, it has succeeded where belladonna and strychnia have signally failed.

H. GREGORY, JR., M. D.

LAUREL, Ind.

The following aphorisms were discovered by a correspondent of the Canada Lancet, who ascribes them to AMEDEE LATOUR:

1. Life is short, patients fastidious and the brethren deceptive. 2. Practice is a field of which tact is the manure. 3. Patients are comparable to flannel; neither can be quilted without danger. 4. The physician who absents himself runs the same risk as the lover who leaves his mistress; he is pretty sure to find himself supplanted. 5. Would you rid yourself of a tiresome patient, present your bill. 6. The patient who pays his attendant is but exacting, he who does not is a despot. 7. The physician who depends on the gratitude of his patient for his fee, is like the traveler who waited on the bank of a river until it finished flowing so that he might cross to the other side. 8. Modesty, simplicity, truthfulness! cleansing virtues, everywhere but at the bedside; there simplicity is construed as *hesitation*, modesty as *want of confidence*, truth as *impoliteness*. 9. To keep within the limits of a dignified assurance without falling into the ridiculous vauntings of the boaster, constitutes the supreme talent of the physician. 10. Remember always to appear to be doing something—above all when you are doing nothing. 11. With equal and even inferior talent the cleanly and genteely dressed physician has a great advantage over the dirty or untidy one.

The Journal of Inebriety says a large gathering of philanthropists, statesmen and physicians met recently at Zurich, Switzerland, and after discussing alcohol in all its phases, declared that it is destitute of nutrient value. On the question of its value in the sick-room, no agreement was reached. The Medical Record justly remarks that a Congress whose labors resulted in an agreement on such a physiological untruth, and in a disagreement on an evident clinical fact, needs, apparently, the infusion of a little intelligence into its members and managers.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., DEC. 10, 1887.

Editorial.

TREATMENT OF TYPHOID FEVER.

Our correspondent, Dr. Ketchum, of Palo Pinto, Texas, takes occasion to criticize the treatment of a case of "unusual form of typhoid fever" as outlined in a recent note in The Age. His criticism, boiled down, is a reflection on the somewhat expectant course of the treatment pursued. Dr. Ketchum is, evidently, one of that very practical kind of men who believe it to be the first duty of the physician "to do something," and think it a perversion of their function as physicians, to turn the case over to the *vis medicatrix naturæ*. Far be it from us to decry the power of drugs unto the righting of disturbed function or the removal of structural charge. We admire the man who goes forth with a strong faith in drugs, but he must at the same time be an unerring diagnostician. Without great skill in this direction he is like a blind giant laying about him with a club. Without this qualification for good marksmanship, his blow is liable to hit the patient instead of the disease, and unless he be sure of the drug's reaching the proper spot it were much better that he trust dame Nature to depend on her own resources.

This is a truism in medicine, and it tests the physician's skill quite as much to know when not to interfere, or to administer a placebo, as it does to know when to volunteer assistance.

In the treatment of typhoid fever the above rule of action is very generally observed by the authorities. We have before us a *resumé* of the treatment of this disease followed at several of the leading hospitals of this country. In the Cook County Hospital, Chicago, it is the practice in cases seen early, and when there exists the least doubt of the diagnosis, to give the quinine in a few large doses, producing positive cinchonism, and it is frequently continued in small doses for several days continuously. Should there be any doubt that the bowels have not been thoroughly cleaned out a laxative dose of calomel is given. No patient should be allowed to pass more than forty-eight hours without an evacuation of the colon, to effect which an enema of warm water may be given. In cases of diarrhœa full doses of salicylate of bismuth are given, with small doses of deodorized tincture of opium. Alcohol is given only in serious prostration, with weak pulse and rapid heart. Nux vomica or strychnia are given in the same conditions.

High temperatures are combated with sponge baths and partial or complete packs with tepid water, and with antipyrine or antifebrine. Quinine is not used as an antipyretic. A pack is often continued for several hours, the patient having little or no clothing but the wet sheet. It is not regarded as necessary to resort to any of the water measures till the temperature has reached 103° F., and rarely then unless they are grateful to the patient; and they are discontinued as soon as the temperature falls to 101° F. During the bathing and packing, as well as at all other times, the extremities of the patient are kept warm by clothing and hot applications, regardless of the temperature of the trunk of the body. A bath in a tub has not been used.

Antipyrine is given in ten- to twenty- grain doses at intervals of one or two hours when the temperature is high, and the pulse not specially weak. More than three such doses are rarely received by a patient in a day, or a night. Patients who have, with their high temperatures, fulness and pain in the head, experience most relief from this remedy and to such it is given by preference.

A high temperature for a few hours each day is not regarded as, *per se*, a very grave condition; and the disposition on the part of *internes* to use antipyretics of all sorts, is repressed rather than encouraged.

In the Presbyterian Hospital, of Chicago, a thorough cleansing of the patient is first secured, by means of a full bath externally and calomel internally. In cases of diarrhœa mercury and chalk are substituted for calomel. In doubtful cases, where the possibility of malarial fever is admitted, full doses of quinine are prescribed for a few days, but they are discontinued as soon as the uncomplicated typhoid character is apparent. During the course of the fever, when no complications arise to require special attention, the patient is frequently sponged with tepid water. The kidneys are stimulated with a solution of potassium chlorate—one drachm to the pint of water, the whole to be drank during twenty-four hours. If patients prefer an acid draught, they are allowed lemonade, tamarind water, or dilute phosphoric acid and water, so long as diarrhœa does not forbid. Sleep at night is procured for restless patients by the administration of whisky and milk, or urethan in half-drachm doses, or chloral hydrate with potassium bromide. Opiates are rarely found neces-

sary in uncomplicated cases. Alcoholic stimulants are not used unless the heart shows signs of weakness. A diet of milk and animal broths is carefully administered. Gruel *ad libitum* is given, unless flatulence indicates indigestion of starchy substances.

Diarrhœa is not specially treated, unless it threatens to become excessive. Ordinary cases get nitrate of silver and opium every six or eight hours. If the tongue becomes red and glazed, especially if the heart is at the same time enfeebled, turpentine emulsion gives good results. Unusual flatulence is greatly relieved by disinfection of the bowels with naphthaline, in five grain doses every three or four hours. Antipyrine is reserved for cases with high temperature, restlessness, and insomnia. It is not used continuously.

During convalescence, the principal reliance is placed upon a careful dietary and general hygiene, with such medicines as assist digestion and nutrition. Abundant nursing and *the least possible medicine* are the objects aimed at in the treatment of uncomplicated typhoid fever.

At the Good Samaritan Hospital, Cincinnati, the treatment of mild cases of typhoid fever is purely expectant. When the temperature reaches 103°, antifebrine, in doses of from three to five grains, is given. Few cases require more than three grains to effect a reduction of two degrees within an hour. Five grains produce, for the most part, excessive diaphoresis and chills. When this accident occurs after three grains, antipyrine is substituted, in doses of ten grains. In one protracted (six weeks) case antifebrine, in three to five grain doses, was given every two to four hours, for three weeks, with invariably good effects upon the temperature and general condition. In protracted cases expressed beef-juice with calves'-foot jelly, is added to or substituted for milk. In all cases whiskey is administered as soon as the pulse flags, and in cases of distinct enfeeblement of the heart the sulphate of sparteine is given in one-sixteenth of a grain doses, every four hours, in lieu of digitalis, whereby the stomach is not disturbed.

Upon the supervention of hemorrhage all food is interdicted; thirst is allayed with ice. Ice bladders are placed on the abdomen, small quantities of opium are administered, and subcutaneous injections are made of sclerotinic acid, which keeps better and irritates less than ergotin. In desperate cases salt water is transfused subcutaneously, as recommended by ZIEMSSEN. In all severe cases the temperature is taken in the rectum, a difference of two degrees having been frequently observed between the temperature of the rectum and mouth. In no case is any reliance placed upon observations made in the axilla.

It will be seen from the above that the general line of treatment in the case criticized by DR. KETCHUM, is not without the warrant of very reputable authority.

THE PHYSICIAN OF THE FUTURE.

We believe that recent remarks of ours on the subject of the employment of the physician as a preventer, as well as a curer of disease, have struck a responsive chord in the profession. Innate conservatism will for a time prevent the innovation, but we have faith that those who are now young will not be very old when the ounce of prevention will be bringing quite as much in the market as the pound of cure does to day. The annual address of DR. ARDREW H. SMITH, before the New York Academy of Medicine, will, both because of the merit of the article and of the author's position in the profession, do much toward bringing about that to-be-hoped-for time. DR. SMITH regrets the existing lack of influence of the medical profession on current affairs. Medical men should from their natural qualifications be something more than healers of the sick. In matters of public concern almost any other pursuit requiring similar qualifications may claim precedence. A successful lawyer is known throughout the length and breadth of the land, and his opinion is asked and his aid sought in all matters of public interest. The same may be said of men eminent in theology, in literature, and in science. Their reputation is general, and they are looked up to as natural leaders, and those who give direction to public opinion. But, with few exceptions the medical man, however eminent, is known, except by his own profession, only in the vicinity in which he lives, and even within these limits his reputation is strictly professional. No one ever thinks of looking to him for anything more than a diagnosis and a prescription, or, perhaps, to hew off a limb, or cut out a tumor. And from this it results that the profession as a whole exercises an unimportant influence in the community, and takes but little part in the conduct of public affairs. The cause of this anomalous condition of affairs, DR. SMITH traces to the unnatural relation which the physician bears to the family. If medicine is ever to take its proper rank, the first step must be a remodelling of the relation of the family physician to the families under his charge. There was a time, before the spirit of change became dominant in this as in everything else, when the family physician was a reality, however imperfectly he may have represented the ideal which the family physician of the future will attain. But this field, instead of widening, has contracted on every hand, until, in the cities at least, there is now scarcely standing-room for him remaining. Many a New York lady, if asked what she meant by

her family physician, might reply truthfully as follows: "Our family physician is the doctor we are in the habit of calling in when we don't know what specialty the case belongs to. We have Dr. A for the eye, Dr. B for the throat, Dr. C for the heart and lungs, Dr. D for the nerves, and Dr. E for gout and rheumatism, and when one of us is sick and we don't know how to classify the trouble, we send for our family physician, Dr. F, to tell us."

This is scarcely an exaggerated picture of the relation of general medicine to the public, and we may well inquire what influence, under such conditions, it can be expected to exert in the community. Medicine can be a power in the world only as it is represented by the general practitioner. The specialist operates along a single line, and the lines of the several specialties are ever divergent. Moreover, specialists are occupied with a constantly changing *clientèle*, and lack entirely the opportunity for continuous influence. They cannot impress themselves or their calling upon patients whom they see to-day and lose sight of to-morrow. And further, being concerned only with the relief of existing disease, they take no cognizance of the broader field already alluded to, which it is the proper province of medicine to occupy. It follows, therefore, that in proportion as the specialties acquire an independent position, and the specialist breaks away from the family physician, medicine as a whole becomes restricted in its scope, and suffers a loss of respect and influence. We cannot bring our profession to the highest point of usefulness, and thus secure for it the commanding position which is its due, by resolving it into a multitude of independent and, in a degree, rival factions.

The address proceeds to show that the first duty of the newly-married pair is to select their physician, to whom the family history of both man and wife should be freely confided. This physician should then be made their closest confidant, and his commands should be supreme in all matters of physical, and to a large extent of moral training, of the children. To matters of hygiene, food, dress, social habits and the many other things which have a powerful influence on the child, it should be his duty to attend. In a peculiarly impressive style Dr. Smith emphasizes the various points to which we have time and again alluded in these columns. The following from the concluding portion of the address is so important that we quote it in its entirety:

"But doctors, like other people, must live, and the question will be asked: How can the family physician afford to do this increased amount of work and to cut down the list of his patients as suggested? The answer to this is, that when the public comprehend the full scope of the doctor's work, this work will, if faithfully performed, bring greater respect and increased emolument. Let once the idea be grasped that the physician is engaged in preventing disease instead of waiting for an opportunity to cure it—that his mission is a wider one than merely to deal out pills, or open abscesses, or attend confinements—and the dignity and importance of his office will be increased in the public estimation, and his services will be more highly valued and more liberally rewarded. Why should a lawyer, for services that involve only property, be paid ten times the fee that the physician receives for services that involve life? It is partly, at least, because the client, in the first case, can appreciate and follow the work that is being done for him, while the patient, in the second case, cannot.

"But the extra work of which I speak would be such as the public could thoroughly comprehend, and they could judge for themselves of its value. It is one thing to pay out money which represents merely certain prescriptions written, the effect of which may not have been obviously beneficial, and quite another thing to know that the semi-annual check includes the recognition of a watchful care and a skillful oversight that have surrounded the whole household with a protective influence.

"It will be inferred from this sketch of his duties that the family physician of the future will need to be a man of varied culture and great learning, of deep sagacity and sound judgment. He will need to know much more than how to make a diagnosis or to write a prescription. He will have daily use for more, and more varied knowledge than any other man in the community. His preparation will require as its foundation a thorough preliminary education in lines that will give the greatest development to the reasoning faculty, for a man cannot become a good physician by studying medicine only. He will need to be trained to view a question from all points, and take account of everything that may throw a sidelight upon it. He will require a detective's quickness of perception, a lawyer's skill in weighing evidence, a business man's method and system, and a clergyman's self-abnegation. His professional training might well omit a great deal that now occupies time and yields no practical result, while it should embrace much that never yet has entered into a medical curriculum. To the higher education of which we hear so much in medical circles, should be added the broader education of which we hear comparatively little.

"Upon the correctness of his conclusions will hang the weightiest interests. He will need to have the courage of his convictions, and to be willing to go counter, when needful, to the current of public opinion. While he will have warm friends, he will have bitter enemies also;

for his influence will be opposed to many schemes of selfishness and greed. Wealth will not flow into his coffers; in fact, he will need no coffers, for his wife's milliner will probably have an income larger than he. Yet, withal, while having ten or fifteen years of vigor still before him, he may be able to retire, leaving the active duties of his profession to be carried on by his associate under his supervision. He will then have leisure to take a more active part in measures of public benevolence, and especially in matters relating to the public health. In the governing boards of institutions, in municipal affairs, in the state and national legislatures, his influence will be felt for the common good. His pen will be a ready agent in framing public opinion in favor of liberal action in all matters of substantial sanitary reform. The burdens which rest upon the poor, making healtful living almost an impossibility, and the self-imposed burdens which produce nearly the same result upon the rich, will alike engage his efforts toward practical amelioration. In short, under all circumstances and in all positions, he will so represent the higher and broader aims of medicine as to give the profession a standing before the world commensurate with the dignity and importance of its office."

Notes.

The following is an extract from a petition, written in "English as she is spoke," by a native East Indian to the governor of his Province: "That your lordship's honor's servant was too much poorly during the last rains, and was resuscitated by which medicines which made magnificent excavations in the coffers of your honorable servant, whose means are circumcised by his large family, consisting of five female women and three masculine, the last of which are still taking milk from mother's chest, and are damnably noiseful through pulmonary catastrophe in their interior abdomen."

The French call the womb-disease mania "folie gynecologique," and the Germans know it as "mutterleib krankheit-wahnsinn." The victims of it must have local treatment. In this section they go by the name of "womb-cranks," and the woods are full of them. The physician who tries to do anything for them without using his speculum numbers them among his patrons for but a brief period. It would be amusing if it were not sad to hear them talk of their uteri, ovaries, Fallopian tubes, etc.

In Philadelphia JANET E. RUNTZ-REES continues to raise her voice, or rather, work her pen, in the Medical and Surgical Reporter. She is an authority on subjects connected with the procreative function. She closes an article with the following sentiment: "Every sexual union, of whatever nature, lawful or illicit, that does not include a harmonious relation, is prostitution, the mere gratification of unhallowed lust, to be followed by the unerring Nemesis of outraged Nature,—by suffering to the third—aye to the fourth generation."

Great are the wonders of the telephone. A physician reports to us that he was saved a two-mile ride through a driving storm the other night by having the patient, a child, brought to the instrument and held there until it coughed. He diagnosed false croup, prescribed two grains of turpeth mineral, and turned in for an undisturbed sleep during the remainder of the night. He found the patient in the morning doing nicely—under the care of another doctor.

Here is an interesting item bearing on the subject of maternal impressions, vouched for by DR. WM. GOODELL, of Philadelphia: A physician performed the operation of circumcision on a man whose wife, who was a witness to the procedure, was in the early months of pregnancy. When her child, a boy, was born it was found that the glans penis was exposed, the prepuce well retracted, with granulating edges, presenting an appearance similar to that of a recent circumcision.

The Crown Prince is receiving the benefit of an aggregation of laryngological talent never before centred on one man. SIR MORRELL MACKENZIE is in charge, and as regular consultants he has DR. L. VON SCHROTTER, Professor Extraordinary of Laryngology and Internal Medicine in the University of Vienna; DR. HERMAN KRAUSE, a distinguished teacher in the University of Berlin; and DR. M. SCHMIDT, of Frankfort-on-the-Main, a laryngologist of large experience and extended reputation.

A good method for preserving a solution for hypodermic use is to place it in a bottle over the mouth of which is stretched a non-perforated rubber nipple. This nipple is perforated by the needle of the syringe when the fluid is desired. On withdrawal of the needle the elasticity of the nipple closes the small hole created by the puncture and the freshness of the solution is thus preserved for a great length of time.

The British Medical Journal mentions as an instance of the devotion of medical men to humanity, the case of DR. LANDON, a surgeon in the British Army. Mortally wounded himself, and with the agonies of death closing in, he heard a wounded soldier shrieking from his

sufferings. Forgetful of self he crept to where the man lay and gave him a hypodermic injection of morphine to relieve his distress, and giving it, died !

The medical students of Toronto, Canada, have a temperance association, the members of which must either pledge themselves to total abstinence or promise that they will do no "treating." The membership number 165, and all except one have taken the former pledge. This solitary individual take a "nip" himself when he wants one, but pays for none for his friends. The "anti-treating" feature of the association is a good one.

Dr. J. Z. Scott calls attention to an error in the prescription contained in his note in the Age of the 10th ult. As printed it called for antipyrine gr. vij; the doctor intended it to read antipyrine gr. xlij, or a fraction less than three grains per dose.

The Western Medical Review declares that since the advent of cold weather, the number of articles bearing on sexual intercourse has so largely increased as to make one feel that the change of season has had a happy influence on the erotic tendency of writers.

The injunction of German obstetricians now is, for the third stage of labor, "hands off." The command is absolute. Until we have seen some evil from securing the "wooden feel" of the uterus before leaving the bedside, we shall continue to disobey the injunction.

The physician who conceived the stenocarpine, or gleditschine, combination must have had a very indifferent opinion of the skill of his contemporaries. This bold attempt to palm off this fraud on the scientific section of the profession evinces a refreshing supply of "gall."

Strumpets rarely conceive, the reason being the fact that they nearly all have had gonorrhœa. Dr. Goodell states that he has never known a woman who has had gonorrhœa to become pregnant.

Mr. Emlen Painter, Ph. G., in the American Druggist, computes the number of proprietary medicines in the market at thirty-six thousand five hundred. He holds them all as directly at variance with scientific progress.

Dr. Bartholow recommends a three-grain pill of iodoform three times a day, as a remedy for the flushings and other morbid sensations peculiar to the climacteric.

The action of corrosive sublimate is said by Dr. Laplace, of New Orleans, to be greatly enhanced by the addition of tartaric acid.

Book Notices.

The Physicians' Leisure Library. Diseases of the Heart, Vol. II. By Dujardin-Beaumetz, M.D., Translated by E. P. Hurd, M.D. Geo. S. Davis, Publisher, Detroit, Mich.

This work can hardly fail to be regarded by any attentive, intelligent reader as a most important addition to medical literature, forming, as it does, a complete index of the previous knowledge existing on the subject of Aneurism of the Aorta, with the addition, by the translator, of all valuable subsequent discoveries. Nor will this be regarded as a mere empty assertion when the progress made in the treatment of this disease, of late years, is calmly considered. Its gravity, mysterious features and operations, at times, may well impress and, occasionally, perplex and startle the ablest practitioner, who must welcome any new light on the subject. It is fortunate, at present, that the prospect of controlling this disease, and thus prolonging the lives of the afflicted, is brightening daily owing to a new method of applying electrolysis and the use of large doses of iodide of potash.

This volume, like all others from the pen of Dr. Dujardin-Beaumetz, evinces wide scientific research, as also unusual care and judgment in the handling of his subject; the facts stand well and clearly arranged, important practical rules are laid down where required, details have been carefully grasped, and analyses made with striking accuracy, in a style as admirable as it is effective. The bibliographical references are no less a noticeable and important feature of the work, which is composed from a broad and liberal standpoint. The author's industry is further shown by the extensive use he has made of the medical literature of both Europe and America. Full and complete directions are given how to use electrolysis, which every medical man will appreciate.

Dr. Hurd's work as translator is so superior as to inspire the hope that he will enrich our literature with further specimens of it, which would prove to the material advantage of other authors, like the present. It would be difficult to exaggerate the value of the notes of our American colleague, which, like his clever and important contributions to the medical press, speak volumes for the industry of a gentleman enjoying so large a practice in one of the flourishing cities of Massachusetts.

We are happy to observe that The Physicians' Leisure Library meets with increased favor daily. The enterprise and energy displayed by the publisher well deserves the appreciation and practical encouragement of the profession.

Medical Progress.

CASCARA SACRADA AND ITS USE IN THE TREATMENT OF CONSTIPATION.—In a paper published in *Boston Med. and. Surg. Jour*, Oct. 18, JOHN W. FARLOW, M. D., presents his conclusions derived from an extensive use of this remedy. Although the readers of THE AGE are already familiar with therapeutic value of Cascara, DR. FARLOW'S experience brings out some valuable facts in connection with the exhibition of the drug, and we therefore place it before our readers:

In choosing a remedy for constipation we should select one that will do no harm and whose after-effect is not to increase the trouble for which it was given. It should not cause griping or any uncomfortable feeling, even if this can be overcome by the addition of opium, belladonna or other narcotic. It is also desirable that the remedy should not have to be given in increased doses, but the contrary, and the form of administration should be such that the dose can be small and can be carefully regulated for the individual case. DR. JACOB BIGELOW used to say that "a great deal of the success of a physician depended on his understanding the constitution of his patient; in other words, how large a dose of cathartic medicine it took to move his bowels." It is not generally expected that the remedy should have very much influence on the appetite and digestion, other than as a result of emptying the bowel, but, if the medicine is of itself an aid to digestion, so much the better.

Let us look at cascara and see if it fulfils any or all of these indications. I have used it for two or three years and have notes of over two hundred cases which I have followed long enough to know the result. The cases in which I have ordered it and where the patients have not returned I have left out of consideration entirely. The cases have generally been those of more or less chronic constipation, and often associated with uterine or pelvic trouble as well as with disease of the rectum and anus. I have also used it in pregnancy and after labor. I have, in most instances, prescribed the fluid extract.

I do not propose to consider the various methods of treating constipation, regular habits of defecation, exercise, diet, etc. I take it for granted that all such measures are to be tried before any medicine is given.

Is cascara an efficient laxative? In every case in which I have used it and have the records of, it has not failed to cause one or more dejections for a certain time. Several of the cases have been of very long standing, and had tried all imaginable drugs and combinations of drugs in vain. MRS. S., for instance, forty-five years of age, had recently been in one of the Boston hospitals for six weeks for constipation. She had taken everything but cascara to no purpose.

At the end of ten days, after taking cascara in gradually decreasing doses, her bowels became regular and soon she was able to have a daily stool without any medicine. MRS. H., fifty-six years old, had always been constipated and had exhausted the usual remedies. After using cascara, at first in rather large doses and then diminishing, at the end of three weeks her bowels moved once a day by simply taking fruit in the morning.

Does it cause griping or any uncomfortable feeling? Very seldom, indeed, if it be correctly used and the dose rightly apportioned to the particular person. I have seen two or three cases where the patients complained of some griping, but on investigation I found that more than enough had been taken, or that, instead of diminishing the dose when it had begun to act freely, the same dose had been continued. Cases are reported by others in which griping occurred, but, according to my experience, this must be uncommon, and possibly some of these were due to too large a dose at one time. Some persons seem to be very easily affected by it, and this idiosyncrasy should be borne in mind in determining the dose.

In the administration of drugs which cause griping it is usual to combine with them something to stop the griping; in other words, to allow the drug still to irritate the intestine, but to take away the reflex contraction of the intestine causing the pain, or else to blunt or remove the perception of the pain. This I hold to be a mistake, as the irritation of the bowel is injurious in many cases, and the pain should be the signal that such is the case. The irritation is just as bad for the bowel, even when the pain is not allowed to manifest itself.

Most laxatives have a secondary, constipating effect, necessitating an increase of the dose or a change to some other drug. This is not the case with cascara, as the usual method of giving it is to diminish the dose after a few days.

What is its effect on the digestive system? Its use does not impair the appetite or digestion, but, on the contrary, increases the appetite and promotes digestion. On the intestine it seems to have a tonic action and is particularly adapted to conditions of atony of the stomach and bowels. The stools caused by it are soft, or semi solid and not watery, unless too large a dose has been taken.

I have also found it of good service in the treatment of hæmorrhoids, by relieving the congestion and causing a soft, painless stool. It seems to have a beneficial effect apart from and in addition to its laxative effect in these cases as well as in some cases of fissure.

The following is a good illustration: MRS. F., aged thirty-one, mother of five children, had always suffered from constipation and piles, particularly after labor, and had never found anything to relieve her. I attended her in a difficult labor with breech presentation. She had very marked hæmorrhoids, which caused her so much trouble after labor that she could not sit on a chair, and every movement was painful. She obtained entire relief by using cascara in twenty-drop doses of the fluid extract, four times a day for three days.

The importance and at the same time the difficulty of regulating the bowels in gynecological cases is well recognized, but my experience with cascara in such cases leads me to give it the highest rank. I have notes of its very satisfactory use in several cases of endometritis, large uterine fibroids, flexions and versions, large and tender ovaries, one case of retroflexed pregnant uterus requiring forcible reposition, and a number where there were tender places and bands in Douglas's pouch, readily felt per rectum.

According to my experience, the cases for which cascara is particularly adapted are the chronic cases and especially those with weak, atonic digestive organs. For such patients it is far superior to rhubarb, senna, aloes, licorice powder and the usual laxatives, either alone or in their various combinations. For acute cases its peculiar qualities are not so much required, although it generally acts promptly, surely and without secondary constipation effect.

I have generally used the fluid extract, for several reasons. It is an active and reliable preparation, the dose is small and can be easily regulated by increasing or diminishing the number of drops taken at a time. The taste is bitter, to which some object, while others find it not unpleasant. To the latter it can be given in water or with equal parts of glycerin in water. Most of the substances supposed to disguise the taste only add a sweet to a bitter and the combination is to many worse than either alone. I should say that the fluid extract of licorice is, perhaps, as good an excipient as any. Cascara cordial has an agreeable taste, and is preferred by many. The dose is, of course, larger and is not so easily regulated as the fluid extract. The solid extract is given in pill form, and consequently can be taken without the bitter being tasted. If, however, the dose in each pill proves too large, a new lot with a similar dose has to be procured, which is a disadvantage as compared with the fluid extract.

The dose of the cordial is about a teaspoonful morning and night, or oftener. The solid extract is given in doses of two grains or less, three times a day. The dose of the fluid extract is from five to twenty-five drops, and I generally order it to be taken as follows: If the case is of long standing and one in which many drugs have been tried, I direct ten or fifteen drops to be taken in water before each meal and at night. If that does not cause one soft dejection a day, in two or three days I increase the dose to twenty-five drops four times a day, and tell the patient to take sufficient to have one dejection a day. Then in a few days, at any rate, or immediately, if he has more than one stool a day, he is to diminish the dose from thirty to twenty-five, twenty or fifteen drops, but always enough for one soft stool a day. It is better to diminish the quantity taken at a time that to lessen the number of times. It will be found that five or ten drops at night often prove sufficient. It is well to omit the medicine from time to time and it can frequently be dispensed with altogether. If necessary to resume it, let only the amount be taken that was previously found to be sufficient.

The preparations of the drug used in medicine are solid extract, powdered solid extract, fluid extract, elixir and the cascara cordial of Parke, Davis & Co. Of the dose and modes of administration I shall speak later.

MALARIA IN CHILDREN.—The class of patients to which I refer in this paper are those of the poor people, and as they pass before my mind and I see how poorly they are clad, fed, and washed, the wonder to me is not that they are ill, but that they are alive at all, and leads one to ask why it is that human beings can so far forget that they are human. Even the domestic animals of these families—which, by the way, are scarcely less numerous than the children—will have about them a cleaner, brighter and more thrifty look than the children. Children, then, with such environments are weakly and stand with open arms inviting all sorts of diseases, to some of which they fall an easy prey. Such, also, I believe are predisposed to malarial attacks, and I have often wondered why it is that death from this source did not prevail among children so vitiated. On the contrary, however, I have never seen a death in a child that I attributed primarily to malaria. From cases seen, I judge it a rare thing in this climate. In the malarial districts of the tropics the death of children from this cause is not at all infrequent.

Of a little over two thousand cases treated by me during the last two and a half years at the College Dispensary, I find about five per cent. suffering from malaria. This convinces me of its prevalence among children. Usually these cases can be traced to those districts skirting the bay or in the vicinity of Gowanus Canal, regions known to abound in malaria. Two or three patients have come to me from the eastern part of the city, and a few from the more healthy parts. These latter, however, gave the history of a previous residence in a malarious district, and were undoubtedly tainted with the disease before moving, and owed their attack to such exposure. The stronger of this class of children are not exempt from malarial attacks but on the whole, respond to treatment quicker than the weaker ones: especially are they restored to their usual health after the more marked symptoms, fever, etc., have disappeared.

Some maintain that children and old people enjoy comparative immunity from this disease, but I believe there are more children living in malarious districts who suffer from this than is credited, from the very fact that its course is more ambiguous than in the adult, and a more careful study of the cases would prove the statement. I believe that many of the long-standing digestive troubles to which the physician's attention may be called are primarily due to this, while the more marked symptoms are wanting. This is a latent type, yet none the less malarial.

The quotidian and tertian are the prevailing types. One case presented itself that had a good week followed by a poor one, and so on, for three to four weeks, Flint maintains that in children the type is almost uniformly quotidian. I have found many tertian also.

The manner of invasion is not so clearly defined as in the adult, and differs widely from it. In place of the usual chill we have symptoms of nervous depression, sometimes convulsions. In some cases even these are wanting, and the fever is the main thing noticeable. I have found both varieties occurring in the morning as well as the latter part of the day, more of the quotidian in the morning, however. The afternoon attacks are more frequently at from four to six o'clock than at any other hour, extending up to ten o'clock or later. There have been a few cases with both morning and afternoon attacks.

The second stage is the prominent one, and is the longest of any. The fever is high, as in the adult, and is spoken of as a "burning

fever" by the mothers. A temperature of 105° F. or more is probably not at all infrequent.

The third stage is not marked by such profuse sweating as in the adult. It is usually scanty, cold, and clammy, and entirely wanting ofttimes. The whole course is marked by a continuous course of malaise, and sometimes by constant fever.

The spring and autumn are the seasons in which the cases occur. Scarcely a case is noticed in the summer. More cases occur in the spring than in the autumn.

One patient, a light, fair child, now five years and a half old, has had attacks spring and autumn for the last two years. These attacks are from three to five weeks' duration, and are noted for their general malaise rather than the severer symptoms. There is only a moderate amount of fever late in the day, with slight, cold perspiration, anorexia, coated tongue, and marked anæmia. From its regular occurrence and obstinacy, it has proved of special clinical interest.

The average duration of these attacks is from a week to ten days, followed by a period of convalescence fully as long or longer. No special difference is noticed in the full time of the different types, save that the period up to convalescence in the quotidian may be shorter.

The prevailing symptoms are anorexia, malaise, frequent constipation, coated tongue, sweating, and pyrexia. The marked anæmia following is one of the most common and prominent of all the features of the disease in children. It exceeds the anæmia of adults recovering from the same trouble. Only four or five per cent. of these patients were jaundiced, and none of the cases proved obstinate. Twenty per cent. of the patients had bronchitis due to the malaria. This seemed the most frequent of any of the complications save the anæmia, and occurred most in those having the cachexia.

I wish I might offer something new as to lines of treatment. The plans followed have been to relieve constipation first. The mild chloride of mercury in small, oft-repeated doses, followed by quinine during the continuance of the fever. In cases where the fever was looked for at a certain hour the quinine has been given in three doses at two hour intervals, the last dose two hours before the expected fever. Where the fever was more of a constant nature the quinine has been given at intervals four times daily, in either case continued till the fever abated. Fifteen grains in a three-ounce prescription has been used most; occasionally twenty grains; of this a drachm has been the dose.

In the stage following the fever Fowler's solution has proved itself far superior to quinine. Quinine by inunction was used only once, in the case of a sensitive stomach. The tincture of the chloride of iron for the subsequent anæmia proved efficacious. In the cases of bronchitis, quinine was combined with a cough mixture, and with much better results than when omitted. Nux vomica with the bitter tinctures proved also a good after-tonic.

On the whole, I find the cases yield much more readily to treatment than in the adult.—EMMETT D. PAGE, M. D., in *N. Y. Med. Jour.*

REST AND EXERCISE AS THERAPEUTIC AGENTS.—We have reached an epoch when drugging, as such, has fallen into disrepute. When called upon to deal with a case of disease, the practitioner no longer regards the administration of medicines as his chief duty; nor does he expect, except in a very limited number of cases, that the Pharmacopœia will yield him any medicament which can be fairly described as a specific remedy for the disease before him. While according drugs their due value for their power to control symptoms and to help the patient over the crisis of his malady, the physician is more and more disposed to rely for cure upon the removal of causes which promote disease, and the regulation of food, exercise, and general habits of life. In this connection one problem often presses itself strongly upon his attention, namely, shall the affected organ be permitted to rest, or shall it be stimulated to increased activity.

The difficulty of finding a clear rule of practice arises mainly in connection with chronic cases. In the case of an organ which is the seat of acute inflammation, we can have no hesitation in advising that it shall have as complete rest as the needs of the economy will permit. The inflamed joint, the inflamed eye, the inflamed stomach, and the inflamed kidney must be allowed to rest, entirely, if possible, and if that be impracticable, their functional activity must be reduced by all the means at our command. But when the acute symptoms have subsided, and the subacute is passing into the chronic condition, difficulties may at once arise.

Take, for example, the first case we have instanced, namely, an inflamed joint. Rest is at first essential, but if the rest be too long continued, mischief results, and the failures of the surgeon in this matter often become the material for the triumphs of the bone-setter and the "miraculous cures" of the itinerant quack. Few reflections can be more mortifying to the surgeon then the thought that by undue timidity and too prolonged adherence to a line of treatment which at the outset was perfectly correct, he has injured his patient and brought discredit both upon himself and his profession. Such errors would be less frequent if the practitioners were constantly on the alert to give rest and exercise their due place as therapeutic agents.

A similar error is common in the treatment of gastric derangements. The practitioner begins, rightly enough, by checking undue indulgence and prohibiting the use of all injurious articles of food. Too often, however, he contents himself with mere prohibition, and forgets to suggest suitable substitutes for the dietary which he interdicts. The patient becomes infected with the same Spartan zeal, and voluntarily adds to the strictness of his adviser's injunctions. Not very rarely the end is worse than the beginning. Instead, it may be, of a little functional dyspepsia, which, however disagreeable, is a very innocent malady, the patient, by his process of modified starvation, lowers his constitutional tone, and invites some serious organic affection. The practitioner began, no doubt, with the very sound principle of giving a disordered organ rest, but he forgot the wise aphorism *Ne quid nimis.*

For generations the main idea in the treat-

ment of organic heart-disease has been physical rest to diminish the labor of the damaged organ. We have been in the habit of prohibiting all forms of active labor to the sufferers from cardiac disease, and the principle of our treatment has been the unexpressed but ever present idea, accepted as a self-evident axiom, that perfect rest was the best means of securing muscular compensation. PROFESSOR OERTEL'S experiments and results have come with startling surprise upon those who forgot to distinguish between a useful principle and the exceptions which the multiformity of disease renders it imperative to recognize. As is well known, he treats a considerable proportion of cases of organic heart-disease by regulated exercise, especially graduated ascents of mountains, and his results place the value of his method beyond reasonable dispute. There is nothing really surprising either in his treatment or the success which has attended it. A little reflection will suffice to convince us that, while rest is often useful and indeed quite indispensable in heart-disease, there are yet many cases in which well regulated exercise will improve the nutrition of the cardiac muscle, as of the rest of the muscular system, and hence tend to the promotion of circulatory vigor.

Nervous affections, again, afford many instances in which rest and exercise will call for very discriminating regulation. When the practitioner gets a case of brain-worry and brain-fag from over-work or undue excitement, he is apt, as a mere matter of routine, to order the patient off to the seaside or the mountains, and to tell him to take complete rest, and dawdle away his time as best he may. This plan sometimes succeeds, but the cases are not rare in which it fails utterly. The busy brain sometimes refuses to rest, and the usual channels of activity being closed, its energies flow out in novel and abnormal directions. Ill-temper, insomnia, *ennui* appear perhaps for the first time, and the treatment by rest is a complete failure. In such cases the indication is not abstinence from work but a change of mental occupation, which may be attained by travel, by the sedulous cultivation of some hobby, or perhaps by serious intellectual labor in some unaccustomed groove.

We are far from seeking to disparage the immense advantage of rest when wisely regulated and duly limited. But "rest in the recumbent position" is not the essence of all surgery, nor are a warm bed and a quiet room the sum and substance of the last will and testament of a moribund science of medicine.—*British Med. Jour.*

ON A NEW METHOD OF TREATING THE VOMITING OF PREGNANCY.—The complete and rapid relief which followed the local application of cocaine in the three cases here briefly recorded seems worthy of note:

Case 1.—Mrs. W., aged nineteen (hospital patient), applied March 11, saying she "had not been able to keep anything down for the last month." The patient looked emaciated and ill; she was just two months pregnant with her first child. On examination, the uterus was found to be markedly anteflexed, and decidedly tender when pressure was made on the cervix. Sims' speculum was introduced, and the whole of the vaginal roof and cervix freely painted with a 15 per-cent. solution of cocaine, a probe covered with cotton-wool and soaked in the solution being carefully inserted into the cervical canal to the depth of three-fourths of an inch. A dose of peppermint-water was ordered (as a placebo) three times a day. The patient returned on March 18, saying that she had not vomited once since taking the medicine. She has continued perfectly well since.

Case 2.—Mrs. T., aged 26, nearly three months advanced in her second pregnancy, consulted me for severe vomiting, which had existed for a month. On vaginal examination the uterus was found to be normal in position, but tender on pressure. The same local treatment was adopted as in Case 1. No medicine was prescribed. The result of the treatment was precisely similar, for the patient did not once vomit after the application.

Case 3.—Mrs. G. R., aged twenty-three (a hospital patient), two months and a half pregnant, applied on June 17 for relief from constant vomiting, from which she said she had suffered for six weeks. On examination, the uterus was found to be somewhat anteflexed. The same treatment as the foregoing was adopted, except that no application was made to the interior of the cervical canal. Peppermint water was taken three times a day. On June 24 the patient stated that she had had no vomiting for four days after her last visit, but that then it recurred, although in a less severe form. Another application of cocaine was made, but this time the interior of the cervical canal to the depth of three-fourths of an inch was painted. On July 1 the patient said that no further vomiting had occurred. She could take her food with a relish, and was feeling quite well.

Remarks.—If these cases be not mere coincidences, we have in cocaine, locally applied, a most valuable remedy for the speedy cure of that distressing condition—the vomiting of pregnancy. It will, however, be necessary before we are in a position to form a definite opinion as to its efficacy, to apply it in many more cases, and it is in the hope that all who have an opportunity will try this simple remedy and publish the result that I venture to report the above cases. It seemed to me that the *modus operandi* of the cocaine would be to remove the morbidly hyperæsthetic condition of that portion of the uterus about the internal os which is supposed to exist in these cases. It is most interesting to note that in Case 1, where marked anteflexion was present, the vomiting was completely stopped without any interference with the flexion It is evident from Case 3 that in order to obtain the full effect of the cocaine it must be applied to the cervical canal, and herein lies the danger, for a careless or unskilful application might easily produce what is of the utmost importance to avoid--viz., abortion; still, with proper care there is very little risk, as I have many times made applications to the cervical canal during gestation without terminating the pregnancy in a single instance. —WM. DUNCAN, M.D., F.R.C.S., in the *Lancet.*

CREASOTE IN PHTHISIS.—According to the Medicinische Chirurgische Rundschau, No. 6, 1887, DR. SOMMERBRODT, of Breslau, has re-

ported 5,000 cases of pulmonary tuberculosis treated with creasote, all being ambulatory cases, the series extending over nine years. A number of patients were treated with Bouchard and Gimbert's formulæ, 27 per cent. recovering. Other formulæ used were 13.5 parts(?) of creasote to 1 quart of alcohol or Malaga wine; 2 parts of creasote to 150 of cod-liver oil. The dose of these preparations was the same, from 3 to 5 ♏ of creasote being taken daily. Another formula used was creasote 3.5 parts, alcohol and water of each 125 parts; one teaspoonful twice daily in a glass of water. This was used in 30 cases. The best results were obtained from the following: Gelatin capsules, each containing ♏ ½ of creasote and ♏ 3 of balsam of tolu. On the first day of treatment the patient took one of these capsules, two on the second day, and for eight days afterwards three were taken with water after meals. In the second week four capsules were taken daily, in the third week five capsules daily, and in the fourth week six daily, after the principal meals of the day. Given in this way the drug was well borne as a rule. This medication was frequently continued for a year, and sometimes combined with favorable climatic treatment. It was in young patients that the best results were obtained, and in the first stages of the disease, with symptoms not well defined. Good results were also obtained in scrofulous affections of glands.

The drug seemed to relieve irritation and cough, in many cases to such an extent that narcotics could be dispensed with. Bronchial secretion and night sweats were also diminished. Sommerbrodt says that the drug must be taken for three months or a year, and that the more of it taken the better the results. With such an array of cases as he presents, and with the results he has obtained, it certainly seems that the method is well worthy of trial.—*Jour. of Amer. Med. Association.*

The Oil of Turpentine as an Antiseptic.—The present era in the history of medicine will, as some one has aptly expressed it, be known as the antiseptic or germicide epoch, and experimental therapeutists everywhere are employed in starting "cultures", and testing the anti-microbic power of the articles of our materia medica. As is usually the case, the call for an increased number of drugs to act in this manner has been answered by the chemist and pharmacist with their accustomed promptitude, and at present we have laid before us a list of chemical combinations, purporting to be antiseptic or germicidal in their action, which has been evolved *pari passu* with the discovery of the micro-organisms. Not satisfied with these however, investigators go still further, and attempt to discover not only the drugs which are active, but those whose effects are virtually negative. An example of this is well represented by the article of Holmfield in the Fortschritte der Medecin, of October 1, 1887, in which he calls attention to the effect of the oil of turpentine on germs of various kinds. His method consisted in taking fresh colonies of the micrococcus prodigiosus and staphylococcus aureus. The vessels used were carefully sterilized, and agar-agar and gelatine were used as culture-beds. After some hours, oil of turpentine was applied, and its effects on the life and growth of the germs noted. Under these circumstances it was soon evident that the turpentine, unless applied in large amounts and for a considerable time, produced no effect of sufficient force to enable one to use the drug in ordinary everyday life for the purpose of antisepsis. Its irritant properties when concentrated, and its loss of the little retarding power which it possesses on micro-organisms, as regards their growth, on dilution, exclude it from the use on the tissues of the patient, and confine its sphere of value to the instruments employed. Certainly, from our present knowledge of the drug, we may rest assured that it is only proper to use it as an antiseptic when nothing better can be obtained.—*Med. News.*

Egyptian Tamarind for Hemorrhoids.—Very recently my attention has been attracted to the Egyptian tamarind flower, a blossom that may be considered a most excellent specific for bleeding hemorrhoids or piles. In my practice I have had the most extraordinary results from its positive curative powers, and especially has this been so in cases deemed incurable and given up by other physicians. Prior to using it, I was in the habit of employing injections of turpentine, perchloride of iron, ointments of nutgall, oxide of zinc, rosemary, acetate of lead, and numerous other astringents; and while these may all give temporary relief, the actual or net result is irritating rather than soothing, as most certainly are the effects of the tamarind flower. I have noticed, after giving my patients three or four wineglassfuls of the decoction, that they were instantly relieved of the persistent itching and burning sensation, while the excrement seemed to be materially altered by it. I have also tried tamarind in nervous debilitated women, with like good results, especially when their sickness has been complicated with costiveness and loss of appetite. In these cases tonic properties were plainly discernible, and tamarind flower may, in my judgment, be well considered a "tonic laxative."

In Dr. W. H. Howell's essay, read before the State Society at Scranton, Pa., he speaks of tamarind flower in decoction as one of the best laxative nervines. The flower also makes an excellent face-wash, and for the removal of freckles and pimples it cannot be excelled.

In this present day, when both the profession and laity are fully aware of the fact that the physician is by no means the only resource and medium of alleviating and curing diseases, I should like to have it placed on record that for the disease mentioned herein, I believe the tamarind flower possesses more virtue than any other drug.—J. C. Brobst, M. D., in *Med. and Surg. Reporter.*

Erysipelas in Infants.—In a paper on the clinical study of this malady published in N. Y. *Med. Record*, Nov. 12th, 1887, Dr. J. E. Atkinson thus summarizes his conclusions as to the etiology of erysipelas. While the writer cannot assent to the assertion of even such distinguished authority as Jonathan Hutchinson, that erysipelas is a non-specific disease and of spontaneous origin, he is by no means of the opinion that it is specific in the sense that it is due to a single specific organism, as are small-pox, scar-

latina, etc. He agrees with a number of writers who think that it may be an expression of one or more of a number of specific causes; that it should be regarded as a symptomatic inflammation, in which its exciting micro-organisms, themselves differing in nature, react upon the economy in a more or less similar manner, and of the activity of which it may be only one of several phenomena; that while experimental observation may establish the identity of the streptococcus erysipelatis of FEHLEISEN, as a micro-organism capable of exciting erysipelas in man and other mammals, by inoculation, neither experimental research nor clinical observation will establish it as the sole cause of even the restricted form of erysipelatous inflammation to which its discoverer would apply the term erysipelas Finally, it may be said that no conditions are more favorable to the establishment of these opinions than the observation of the erysipelas of new-born and nursing infants, which in other respects differs from that of older persons in its greater tendency to migration, to a protracted course, and to a fatal termination, and, last of all, to the occasional development of an œdematous induration of the affected connective tissue to some extent resembling scleroma neonatorum.

ALVELOZ IN THE TREATMENT OF CANCER IN THE NEW YORK SKIN AND CANCER HOSPITAL.—DR. J. E. JANVRIN, surgeon to the New York Skin and Cancer Hospital, reports in the Annals of Gynæcology, a number of cases representing cancer of the breast, epitheliomata of the cervix, nose, forehead, and vulva. These and several other cases of epitheliomata of the cervix, in which the disease was far advanced, warrant the statement that alveloz has the effect of diminishing, in a marked degree, the amount of discharge and rendering it decidedly less offensive.

Alveloz is a Brazilian plant, and belongs to the family *Euphorbiaciæ*. In only one case he has seen unpleasant effects. In this case, after one of the applications, the patient became somewhat collapsed, cold, and nauseated, and after some eight hours passed a large quantity of urine with a decidedly offensive odor.

As a local application, he prefers it to any other escharotic in such cases of epithelioma of the cervix as are not far advanced, and in which for any reason it has been decided not to extirpate either the cervix or the entire uterus. In cases, also, in which the disease is so far advanced that any other operation than curetting is contra-indicated, the application of alveloz once or twice a week has proved very effective in diminishing pain (after the immediate pain produced by the application has ceased), and in decreasing the quantity and offensiveness of the discharges, thus prolonging the life of the patient, and making her presence much less objectionable, for a while at least, to those in constant attendance upon her.—*Practice.*

ERGOTIN AS AN ADJUVANT TO DIGITALIS.—ROSENBACH, in the Berliner klinische Wochenschrift, No. 34, 1887, reports good results from the combination of these remedies in (1) aortic insufficiency; (2) in idiopathic dilatation of the heart, with alterations in the elasticity and contractile power of the blood-vessels; (3) in arterio-sclerosis.

He suggests the following formulæ:

℞ Inf. sec cornut., ʒ 2½.
Æther. sulphur., ♏ 45.
Acid. hydrochlor., ♏ 15.
Aquæ, ℥ 4½.
M. Sig.—Teaspoonful every two or three hours.

Also
Ergotin, gr. 30 to 60.
Acet. digital., ♏ 75.
Aquæ, ℥ 4½.
M. Sig.—Teaspoonful as indicated.

In pill form.
Ergotin, gr. 45.
Pulv. fol. digital., gr. 30.
Pulv. et. ext. gentian, q. s.
Ad. pil. 50 in num.
Sig.—Dose, two or three pills.

Also
Infus. fol. digital., ♏ 23.
Ergotin., gr. 30.
Aquæ, ℥ 4½.
M. Sig.—Teaspoonful every two hours if needed.—*Med. News.*

NOTE ON THE USE OF COLCHICUM IN GOUT.—ALFRED H. CARTER, M. D., Physician to the Queen's Hospital, Birmingham, publishes in *Birmingham Med. Review* for Oct. '87, a paper on the above subject. His conclusions are as follows:

First, that colchicum should be avoided in all cases attended with debility and cardiac feebleness; and that its use should be confined to early attacks of a sthenic type, and a pulse of distinctly high tension. Also, from the liability to depress the system, and to interfere with renal elimination, its administration should not be continued for a longer period than is absolutely necessary for the relief of pain. In order to prevent the employment of a larger quantity than is necessary for this purpose, it is desirable to give the drug in moderate doses, repeated at short intervals, rather than in a large single dose. In this way the action may be kept more perfectly under control. Lastly, since there is no evidence to show that colchicum has any *curative* influence, but rather that, in spite of the relief often afforded, it tends to encourage recurrence, it is safer to avoid its use altogether when possible; and under no circumstances should a patient be allowed to resort to the drug, except under medical supervision. Our use of drugs for therapeutic purposes is, or at least ought to be, largely dependent on current views as to pharmaco-dynamics, and it is with the intention of helping to place the use of colchicum on such a basis, that the above contribution is made.

NITRITE OF AMYL IN CHOLERA.—During an epidemic of cholera in Japan in 1879, it occurred to me to make trial of the inhalation of nitrite of amyl in the treatment of the collapse of cholera. I did so upon the consideration that this drug appears to have an antagonistic

action to the cholera-poison in its effect upon the vaso-motor nerves. The latter causes a dilatation and congestion of the vessels of the viscera, and a corresponding contraction of the more superficial vessels; while we have in nitrite of amyl the agent which, whatever its effect may be upon the visceral circulation, produces a marked dilatation of the superficial vessels, and must, therefore, to a corresponding degree, relieve the congestion of the visceral circulation. I found that cholera patients in a state of collapse, could inhale it very freely before an effect was produced. My plan was to hold a bottle of it under the nostrils, directing the patient to sniff it up freely, and to repeat this frequently. Under its influence a small, thready pulse increased in volume, and where the pulse at the wrist was imperceptible it became perceptible. I have reason to think that in some cases it was the means of saving life. I regret that owing to the accidental destruction of my notes taken at the time, I can give no exact account of the number or details of cases in which it was made use of, but this hint may be of use to others who will have more opportunity than myself of further testing its value. —THEOBALD A. PALM, M. A., M. D. in *British Med. Journal.*

COCAINE IN STRICTURE.—A novel use of cocaine is reported in the New York *Medical Record* by PROF. ANDREW H. SMITH, and with results so encouraging as to justify a repetition of the practice in other similar cases. DR. SMITH recounts how, having been called in a case of retention of urine, he was unable to pass even a No. 4 catheter, this being the smallest he had provided himself with on leaving home. The stricture was situated on the membranous portion of the urethra, and urine was discharged only in drops. According to the patient's own account the obstruction was of several years' standing, but the existing retention was attributed to cold and fatigue experienced on the day preceding the attack. The method pursued by DR. SMITH in the emergency was to pass a large catheter down as far as the stricture, and then inject a few drops of a four-per-cent. solution of cocaine through the instrument. Ten minutes later the patient was able to pass his water freely, the bladder being thus emptied without any further assistance. The suggestion to employ cocaine in this connection presented itself, so DR. SMITH affirms, as the result of observing the mucous membrane of the nose under the influence of the drug, and the success achieved by it will probable encourage others to try it under like circumstances.

THE THERAPEUTIC APPLICATION OF COLLINSONIA CANADENSIS.—In a paper read before the Therapeutic Section of the International Medical Congress (Brit. Med. Journ., Oct. 1, p. 712), DR. J. V. SHOEMAKER directed attention to the value of *Collinsonia canadensis*, or stone root, in acute cystitis. He considers it to be one of the most valuable of the indigenous American medicinal plants. Hitherto it has formed a popular domestic remedy for gravel and other urinary affections. DR. SHOEMAKER finds it useful in incontinence of urine in children, due to spasmodic contraction of the bladder. In painful hæmorrhoids dependent on the spasm of the sphincter, he believes that suppositories made with the root will prove most efficacious in the majority of cases. Its antispasmodic action is also manifest in various forms of colic and gastralgia. In lumbago, relaxation of the uvula, chorea and whooping cough it has also proved of service, while externally it constitutes an excellent application to contused and incised wounds and indolent ulcers. Ascarides are destroyed by a rectal injection of the fluid extract diluted with four parts of water. The most available preparation is the tincture, the dose of which ranges from 10 to 30 drops for children, and 1 to 2 drachms for adults.

METHYLAL.—Methylal, to which attention was directed by DR. PERSONALI, about twelve months since, as a probably valuable anæsthetic and hypnotic (Pharm. Journal [3], xvii, 346) is the subject of an interesting editorial article in the British Medical Journal (Oct. 22, p. 894), in which a *resumé* is given of Messrs. MAIRET and COMBERMALE'S further investigations into the physiological action of this compound. The conclusions arrived at are that methylal, although without effect in alcoholic mania and at the outset of simple mania, succeeds pretty generally in all other cases; but it is necessary sometimes to augment the dose when the system has become accustomed to it, or to interrupt its administration for two or three days. It is important to note that its action is purely somniferous and that its impression on the brain is evidently temporary; moreover, it causes neither depression nor disturbance of the nervous or nutritive systems. The sweet taste and ethereal odour of methylal and its solubility in water render its administration easy, the ordinary dose in cases of dementia ranging between three and five grams, though larger doses may be given. It appears to be unsuited for hypodermic injection in consequence of the intense pain it causes.—*Phar. Journal and Transactions.*

SOME POINTS IN THE TREATMENT OF TYPHOID FEVER.—BOUCHARD endeavors to secure intestinal antisepsis in typhoid fever by the administration of

> Powdered vegetable charcoal, 100 parts;
> Iodoform, 1 part;
> Naphthalin, 5 parts,

which is to be mixed with 200 parts of glycerin and 50 parts peptone; this forms a semi-liquid black mass, which is absorbed in twenty-four hours, of which a spoonful may be given in a third of a glass of water every two hours. The large intestine is to be cleansed morning and night by an enema of carbolized soap, 1 to 100, each containing 7½ grains of carbolic acid in a pint of water. Baths are also given, their temperature being two degrees less than that of the patient at the time, reaching finally a temperature not below 86° F. Quinine is the antipyretic preferred. Free feeding is also a feature of the treatment. The results of the disease under the treatment have been a mortality of from 7 to 11 per cent., the average duration of the disease being nineteen days.—*Revue de Therapeutique.*

NITRATE OF POTASH AS AN ANTI-EMETIC.—DR. V. H. MOORE, M. D., in a letter to the Medical and Surgical Reporter, says: I wish to call the attention of the profession to the value of nitrate of potash as a remedy for vomiting.

Nitrate of potash, properly administered, is one of the surest remedies we have for the relief of vomiting. I have been using it as an anti-emetic in my practice, for the past twelve years, with the happiest results. I have made known its value in this respect to a number of my medical brethren, and they have each expressed themselves as pleased and surprised at its power of allaying nausea and checking vomiting. The manner of administering it is as follows: Give one quarter of a grain, dissolved in a tablespoonful of cold water, every four or five minutes until the vomiting is relieved: which will usually be in from ten minutes to half an hour. I give it in all cases of vomiting, except reflex, and that due to irritant poisons, and have found it succeed in ninety per cent. of my cases. Try it; you will be surprised and pleased. It is pleasant to take, rendering it more valuable in nausea and vomiting in children.

TO EFFECT THE EXCRETION OF SULPHUR BY THE LUNGS.—In order to give sulphur so that it will be excreted by the lungs, DR. BATTESTI prescribes the monosulphide according to the following formula: Monosulphide of sodium, 1 gramme; distilled water, 500 grammes. One teaspoonful of this solution contains one centigramme of the monosulphide, and he gives one or two spoonfuls a day, according to the tolerance of the patient. This dose is equivalent to about one litre of *Eaux Bonnes* water. Calculations based on the chemical equivalents of monosulphide of sodium and of carbonic acid show that one-fourth of a litre of this gas is sufficient entirely to decompose one gramme of monosulphide. The patient, therefore, takes one teaspoonful of the sulphurous solution, and immediately afterward one tablespoonful of Rivière's potion or a glass of seltzer water. Rivière's potion is preferable, on account of its smaller volume. The dose is taken fasting, or four hours after a meal. DR. BATTESTI has obtained the best results from this treatment.—*Med. Record.*

NOTE UPON THE LOCAL USE OF FLUID EXTRACT OF QUEBRACHO.—MR. BORDEAUX writes to the *Archives Méd. Belges* that, according to his investigations which have been conducted within the last few years, quebracho is an energetic aid to cicatrization. Painted upon fresh wounds with a smooth edge, it produces transient stimulation and slight pain, just like collodion, and secures healing by first intention. It can also be used with good results in burns and frost bite, if the ulcerated spots have a good ruddy aspect. The fluid extract of quebracho hardens in an hour after being painted on, and forms a dry crust resembling dried blood, which clings firmly to the tissue and can only be removed by warm water. The secretions of the wound dry up, and if the crust falls off the wound has healed, so that here healing under a scab can be properly spoken of. One great advantage of this treatment consists in the fact that all bandages may be dispensed with.—*Med. and Surg. Reporter.*

EUCALYPTUS IN WHOOPING-COUGH AND IN BRONCHITIS.—WITTHAUR (Memorabilien, Sept. 3, 1887) strongly recommends the administration of eucalyptus for whooping-cough and bronchitis. In whooping-cough, he gives from five to twenty drops of a mixture of equal parts of tincture of eucalyptus and glycerin, according to the age of the child, every three hours. He also administers inhalations as follows: A piece of linen is made into a bag, in which is placed a piece of cotton on which ten drops of oil of eucalyptus is put every morning. The bag is tied around the neck of the child so as to be under the shirt, and so the child is in an atmosphere of eucalyptus by day and by night.

In bronchitis, WITTHAUER gives to an adult from fifteen to twenty drops of the tincture of eucalyptus every three hours. Inhalations are given by placing ten drops of the oil in a cup of hot water, and causing the steam to be inhaled.—*Alleg. Med. Central-Zeitung.*

A SPRAY FOR THE TREATMENT OF WHOOPING-COUGH.—KOLOVER sprays the fauces with the following solution in treating whooping-cough:

℞ Quininæ sulph., gr. 50.
Acid sulphur, gtt. 30.
Aquæ destill, ℥ 5ss.

This may be used every two hours for the first three days, and every three hours for the remainder of the first week, after which it will be unnecessary.—*L'Union Médicale.*

THERAPEUTICS OF NEURALGIA OF THE HEAD.—EULENBURG emphasizes the great value of massage in the various neuralgic affections of the head. The affected parts are both to be beaten rapidly (tapotement) and to be gently stroked (effleurage). Besides, even if the seat of the affection be in the forehead, the occipital region is to be likewise treated. Etiological factors, such as obesity or heart disease, are to receive due attention. Internally antipyrine, in 15-grain doses, is the most efficient remedy. Galvanization is often useful.—*Wien, Med. Presse.*

A CONVENIENT FORMULA FOR THE TREATMENT OF DIABETES BY LITHIUM IN PILL FORM.—VIGIER recommends the following as more convenient than MARTINEAU'S arsenical liquid containing lithium:

℞ Lithii carbonat., gr. iss.
Sodii arseniat., gr. 1-25.
Ext. gentian, gr. ¾.
For each pill.

To be taken morning and night, and continued until sugar has disappeared.—*Buffalo Med. and Surg. Journal.*

The Medical Age.

Vol. V. DETROIT, DEC. 26, 1887. No. 24.

Original Articles.

HEATING AND VENTILATION OF PUBLIC BUILDINGS.*

BY HENRY F. LYSTER, M. D., DETROIT, MICH.

The committee visited the Everett, Wilkins and Hancock schools, and examined the general plans of the systems already in use in those buildings. The two former buildings are old, and the new system has not been applied as perfectly as it is in the Hancock building, which is now being constructed, and in which such modifications of structure as are required have been adapted to it. So far as relates to ventilation there is very much to endorse in this system and but little to condemn, which is not capable of being corrected.

It is a well-known fact that many systems of heating and ventilation are open to criticism and volumes have been written in favor and against plans that have been introduced and used.

There is no building that needs better ventilation than the school building, where are congregated children from so many directions, all more or less susceptible to the contagious diseases of childhood and youth, and many of these diseases, as scarlet fever, diphtheria, and enteric or typhoid fever, are so fatal in every community.

There are no foci for germ-culture that compare with the school rooms. This is shown each year by the increase of contagious diseases immediately upon the opening of the schools at the beginning of the term and after vacations.

Ventilation does not mean either the volume of pure air admitted or the volume of impure air removed, but the affording to the occupants of a building a sufficient quantity of pure air.

The adoption of a good system of ventilation and heating is a desideratum, and we believe that much improvement to the health of the school children will ensue from the action of the school board in initiating a movement in this matter. After the attention of the public has been attracted to the subject of ventilation and heating, and they have had time to study it, it will be as impossible to move them back to the use of unventilated and improperly heated school rooms, as it would be to make again acceptable the tallow candles and open fire places of a former age.

There has certainly been a marked improvement of the Everett and Wilkins schools over former, years since the introduction of the new system. When the school is not in session the school odor vanishes and the general air in the building is fresh and pure as the out-of-door air. All urinal odors have vanished from the latrines at all hours, and there is no suggestion or fecal odor in the vaults.

When the school has been in session an hour or two there is a want of freshness to the air, and the school odor is recognizable to one coming in from the halls.

It is true that the rooms are too crowded with pupils for any system to work perfectly, as will be shown by the mesurements and notes appended.

At the date of our inspection of the Everett school building the temperature at 11 a. m. out of doors, in the shade, was 44° F. In room "G" second floor there were sixty pupils, between 8 and 12 years of age. The register for fresh air and heat was 430 cubic feet *per capita* per hour. The number of cubic feet entering and leaving the room was about the same. The foul air duct was on the same face of the room in which had been constructed the inlet register. The one being in the floor in the north-east corner and the other in the wall near the floor in the north-west corner; the room being south-east room on the second floor.

The arrangements for the removal of the foul air was not scientific and was evidently applied to an old building, as inexpensively as possible. When the system has been applied to buildings in the process of construction this fault is remedied by taking the foul air from near the floor in seven or eight different places on opposite sides of the room.

It is not fair to judge of this system solely from its mode of adaptation to old buildings, when the expense of its introduction may have been limited to a minimum figure, and yet we must not forget that it is being largely applied to old buildings and that these buildings are to be used for school purposes for from twenty-five to seventy five years longer before discontinued on account of age.

* Report to the Wayne County Medical Society of its committee of investigation of the system of heating and ventilation and management of excreta, now being introduced into the public school buildings in Detroit.

The avoidance of the window ventilation will be appreciated by every one as a great advantage, on account of the avoidance of cold draughts upon the heads of the pupils sitting near them, and it will be a noticeable fact that coughs and colds will be very markedly reduced and very many cases of ear-aches and nasal catarrhs avoided by the introduction of the fresh air properly warmed without noticeable draft.

We did not observe any attempt to supply moisture to the warm air supplied by this system, as used; this defect could no doubt be readily remedied at the furnaces in the basement by the use of evaporating pans of water. It is a well-established fact that heated air will hold a much larger amount of the vapor of water than will cold air, and if this is not supplied the warm air will take it from whatever sources it can obtain it.

The natural effect upon the pupils will be that the mucous membranes of the eyes and nose and fauces and bronchial tubes and the skin will be drawn upon to supply this moisture to a much greater extent than if the proper quantity had been already afforded before the air was respired by the pupils. This will unsettle the natural equilibrium of the secretory function of these membranes and tissues and render the pupils more susceptible to the various irritations incident upon this disturbed condition.

There is another well-established scientific observation that is subverted by the plan of drawing down from the upper stories of a building a column of warm air into the basement. This is done by the new system, for the reason that there is the drawing power of the column of rarified air in the main shaft, which is higher, passing up and out and to avoid producing a vacuum the foul air does go down into the lower level. A number of conditions might interfere with this in some measure, as the influence of strong winds impinging upon one face of the building might make certain ducts less effective than others. This arrangement presupposes a perfect and constant current of considerable rapidity in the main shaft and no accidental interruptions ever. It does not appear to us that this unnatural direction need be given to the foul air, but that the foul air shaft could be conducted from each room into the main foul air shaft at a level as high as the room from which it is removed. This we regard as a very important suggestion, and would like to hear the arguments, if any, which could be made on this point.

We regard the dry air management of the fecal and urinary deposits as not necessarily a part of this system of ventilation and heating of the school buildings.

We regard any plan by which the storage of excreta is attempted as of very doubtful propriety, even when it is reduced to a minimum of danger by drying or disinfection of the excreta.

We noticed that the urinals in the boys' latrines at the Everett school was carried into the sewer, and this plan was quite in accordance with the views of the committee.

We would have been pleased to have had the water carriage system applied to the excreta of of both kinds, and the sewer well trapped, and have had the ventilation of the latrines carried on by the same plan as it was in other portions of the building.

In this city where the sewer system has cost $3,500,000 and the water supply system as much more, and where the water carriage system for the removal of fecal and urinary matters has been approved over all other methods, it does not seem a rational procedure to attempt, or entertain, any other method. We would strongly urge the continuance of the water carriage system in connection with the general plan of ventilation and heating introduced.

The suggestions and criticisms the committee have made have not been without careful consideration, and a somewhat lengthened period of study and observation of these matters in their general application. The question of supplying a proper amount of air is simply one of a study of areas and velocities of currents, disturbing conditions and supply of fuel.

Ventilation cannot be afforded without cost, but it is money well expended, and against it an enlightened community will not grumble.

In case of an epidemic of typhoid fever or of Asiatic cholera in the city, the consciousness of the fact that the particular elements, or bacilli, which are associated with the etiology of these diseases, are in large quantities in a desiccated state in the basement and connected with each room by an open flue, would not put us at our ease.

The system, it is true, only works one way—that is, it should only work one way, but janitors, like church sextons, are only mortals, and we would prefer the water carriage system for the removal of the excreta.

The committee has made arrangements for determining the purity of the air in the rooms when the schools are in session, by germ cultures with sterilized tubes, and comparing them with cultures in external air. They would also like to test further the amount of air supplied when the variations of temperature between the in-door and out-door air is greater, as it will be in the colder seasons of the year.

The committee would also like to have further time to report upon the comparative expense of the ventilation and heating, and heating without ventilation plans formerly in vogue.

SUPPLEMENTARY REPORT BY DR. WYMAN.

I was obliged to be absent from Detroit while my colleagues of the committee were making their investigation of the Ruttan-Smeade system of ventilation, heating and disposal of human excreta in certain school buildings in Detroit. I was visiting the insane asylums of Wisconsin by the invitation of the Wisconsin "Board of Charities and Reform," and observed the system of ventilation, heating and disposal of excreta in use in those institutions. In one county asylum which employed what I was informed was the Ruttan-Smeade system, I saw the evidences of fire which had run through the flues and ventilating ducts of the building. The current of air had turned in the main ventilating shaft after the fire started, and carried the flames in the direction indicated. The superintendent comprehended the mechanism of the ventilating system and turning his fire hose into the ventilating shaft filled the building with steam and quickly extinguished the flames. I saw no institution in which the Smeade system of drying the human excreta was practised, although I found it often used for heating and ventilating. In one Insane hospital (Dodge County, I think) the fresh air chamber was partially closed and an insane woman used it as a lying-in hospital for her cats and dogs. The superintendent did not appear to understand the principles on which the success of the system depended. When winds arise in certain directions the current of air is likely to be turned in some of the flues and cause a stagnation in the room from which it emerges. My conclusions were that the drying of human excreta by this method was unsafe and the ventilation of buildings by it was impracticable. It requires the constant attention of thoroughly instructed engineers—is not sufficiently automatic.

GUAIAC IN THE TREATMENT OF SCARLET FEVER.*

BY OSCAR S. ARMSTRONG, M.D., DETROIT, MICH.

To some of you there may be nothing new in the use of guaiac in the treatment of scarlet fever, but after a somewhat careful review of the literature on the subject, I have been unable to find any mention of it. This is the reason for bringing to your notice my experience with it in one of the most dreaded diseases of childhood. While this experience is neither long enough continued nor covers a sufficient number of cases, to justify its being set up as a specific, yet I think it entitles the remedy to a further trial.

STILLÉ classes guaiac as an evacuant and says in regard to its action: "Guaiacum mainly influences the vascular system, promoting the cutaneous exhalation. In some cases it has been observed to produce general lassitude and dullness. In others, according to KRAUS, it sometimes occasions an erythematous eruption."

WOOD, on the other hand, classes it as an alterative, thus: "Guaiac is believed by some to act as a diaphoretic, to do good by increasing the elimination of the skin, but, as I have not been able to obtain either from medical literature or from the exhibition of the medicine, any distinctive proof of its having such action, to any marked extent, I have preferred to consider the drug as an alterative."

I am inclined to believe that the latter classification is nearly correct, both from the history of the drug in the past and its reputed value in syphilis, gout, rheumatism, etc., as well as my own experience with it and its action on the glandular system. I was led to its use in the first instance to relieve a local symptom, which it not only did very effectually but seemed to have a beneficial systemic effect as well. Whether it possesses any action as an antiferment in scarlatina further experience alone can determine.

BARTHOLOW says: "For those cases of scarlatina exhibiting profound alteration of the blood, the remedies possessing antiferment powers, as carbolic acid, salicylic acid, benzoate of soda, thymol, etc., may be employed."

It is possible that guaiac has a similar action to the remedies quoted, *i. e.*, a specific action on the blood. Be this as it may, the fact remains that practically and therapeutically it meets the indications and materially modifies the acuteness of the disease. Having prescribed guaiac in acute tonsillitis for several years past the thought occurred to me, on examining the throat of a child with scarlet fever, the tonsils being very much inflamed, that possibly I might be able to get as good results from its use as I had often seen in simple tonsillitis. Being in the habit of treating scarlet fever symptomatically, and pain in the throat and difficult deglutition being the principal trouble complained of, guaiac, fluid extract, in simple syrup, was the only medicine prescribed. At my next visit the appearance of the throat was much improved and the patient able to swallow with comparative comfort. The treatment was continued a few days longer, when, with the subsidence of the fever and rapid improvement of the patient, it was omitted.

The next case I saw occurred in the same family, a few days later, and was ushered in with the usual symptoms of chills, followed by high fever, intense headache, hard and rapid pulse, pain, dryness and swelling of the palate, tonsils and pharynx. As there was some of the guaiac mixture prescribed for the first case re-

* A paper read before the Wayne County Medical Society.

maining, I gave instructions for its administration in slightly increased doses, as the child was two or three years older. The relief to the throat symptoms was prompt, but the temperature continued high. The tonsils did not become swollen to such an extent as to render swallowing difficult, although the premonitory symptoms were markedly severe. On the morning of the third day earache was complained of on one side. This was relieved by the application of hot cloths. The same evening a slight discharge of thin pus took place from the meatus, and continued until desquamation was completed. The severity of the onset of the disease in this case, and the gradual amelioration of all the worst symptoms, and quick recovery served to strengthen my good opinion of guaiac.

In the following sixteen cases since treated with this remedy, including four of a very severe type, it has not disappointed me in a single instance, though I did not always use it to the exclusion of other medicines when they were indicated. Where constipation and scanty secretion of urine occur, I know nothing better than the pulv. jalapæ co., given in large enough doses to produce free evacuation of the bowels. When the headache is intense and the temperature is high, in the commencement of the attack, I combine with the guaiac, aconite in small doses, often repeated. And when the guaiac is prescribed alone the results are better when given frequently, *in small doses*, being due, perhaps, to its local effect. Another point of no small importance, as the disease is one occuring mostly in children, is its agreeable taste, when combined with simple syrup, or elixir. The fluid extract is the only preparation of the drug I have used, although the tincture, or the ammoniated tincture, might be equally effective. The formula most often prescribed has been:

℞ Fld. ext. guaiac, ʒ ij.
Tr. aconite, ♏ vj.
Syrup., q. s. ad ʒ ij.
M. Sig.—One half a teaspoonful every two hours, for a child one to two years old.

This dose might be increased or the medicine given oftener, though I have not found it necessary to give it in large doses. It is taken without the addition of any water, as a rule, so as to get its best local effect.

Externally, over the throat and cervical glands, a thin piece of fat bacon, well sprinkled with black pepper, or flannel cloths folded and wrung out of equal parts of hot water and oil of turpentine, are applied.

In none of the cases so treated has there been any sequelæ, except one, if this may be called a sequela—an attack of remittent fever about the ninth or tenth day, which yielded readily to the usual remedies. All the cases made a good recovery.

Occasionally it happens that the onset of the disease is so sudden, and malignant, that nothing we can do seems to be of any avail. Such a case occurred in my practice within the past two weeks. A child, nineteen months old, was seized with convulsions, succeeded by a comatose condition from which it never rallied, dying on the evening following its seizure. That it was a case of scarlet fever was well attested by the eruption, which came out freely before its death. Two other children in the same family were also under treatment for the disease at the same time.

No guaiac was given in this, the only fatal case, and I since regret that I did not administer it as an enema, and note the result. I hope those of you who can, will give the drug a fair trial, and find it as satisfactory a remedy as it has proven itself to be in my hands, in the limited number of cases in which I have used it.

18 John R St.

Correspondence.

MEDICAL REGULATION BY LEGISLATURE

In the November issue of the Therapeutic Gazette, a correspondent from Missouri sent the journal the following, which he says is a *fac simile* of the memorandum of an illiterate "M. D." who had preceded him in a case:

Dr.
I prepared fever dro. Ver verie, 10 gt.
Aconite, 5 gt.

Syrup for lungs, Tareter, 3 me.
Capicum.
Acue.
Shugar.

For the Pouls a smale Powder at Night
Leptendrin.
Ipca.
Capicum.
Rehubarb.

Oil and turpentine for the Bouls

---

and a smale dose of oil and turpentine ever 3 hours.

The correspondent winds up by saying "such cases serve to show the results of a law that allows such ignoramuses to degrade the profession."

To be sure the above happened away down in Missouri; but what can we have to offer when much more can be said of would-be

"M. D's." up here in enlightened Michigan, where we have a registration law regulating the practice of medicine? Not long since I had the privilege of reading an affidavit given by a certain "M. D." to the railroad officials, as is customary before a corpse can be taken on board a train. The following is a copy of the affidavit.

"To who it may consern this is to sertify That the diseased died from cholery Infatum and not from any contiguous diseas."

DR—— ——

On September 3, I was called in consultation with this same "M. D." in a case of confinement. MRS. A. had been in labor 48 hours when a messenger brought me word that a lady was dying. "Come as quickly as possible and be sure and bring your instruments." Upon my arrival I found the whole household, consisting not only of the family, but the whole neighborhood of women in a state of perfect bedlum.

Upon inquiring I learned the patient had taken teaspoonful doses of fluid extract ergot, every half hour "but it was no good."

On examination I found the fœtal head in the first position; but it was caught in the pubic arch and merely by sweeping my finger around the head it was disengaged, and the child born within two minutes, much to the surprise of all in attendance. I noticed at once, however, that the child was dead, and upon examination found the cord severed about 12 inches from the abdomen.

Feeling indignant that a nice, plump, 10-pound boy should be so outrageously murdered, I sharply criticised the "M. D." for severing the cord ere the child was born. The only reply I received was: "Why! I often cut the cord a half an hour before the child is born;" and when informed if such was the case he would always have still-born children, he wanted to know what that meant, and when explained, denied that such would be the case.

This same "M. D." had a case of confinement some time previous, in which there was a breech presentation; upon examination he felt the child's scrotum, and thinking it was the woman's bladder, and that it must be got rid of before she could be delivered, took a button hook and tore the scrotum completely off.

If necessary, I might cite many cases showing that there are yet unworthy men practicing medicine in this State, in spite of the registration law which is in effect. This law does not, as it should, shut out illiterate scoundrels who prey upon the people.

C. B. SICKLES, M. D.

ASHLEY, Mich.

The following has been received as another specimen brick from a state which makes pretensions towards regulating the practice of medicine. Regulation evidently does not always regulate:

Precreption

Comphory, 2 oncers.
Honey, ¼ pound.
Copris, ¼ once.
Exscract Dandarline in Gum, 1 once.
Alcoholl, 1 once.
Podofilum, ½ once.
Queen of Meder, ½ once.

[The above is quite interesting, and the interest is not diminished by the very natural query as to how it is possible to sever the cord, when the head is in the first position, before the child is born. Perhaps Dr. Sickles will kindly elucidate. ED. MEDICAL AGE.]

THE REGULATION OF MEDICINE.

The article by DR. F. R. BOYD, in the MEDICAL AGE, of the 10th inst., which followed that of DR. J. V. STEVENS, in November 10th, is of undoubted interest to the medical community. The medical profession is at present in a transition stage. Advancement is the watchword of the hour, and in a few years the medical colleges will be compelled to adopt a three- or four-years' course, as many have already done. I agree with DR. STEVENS that if a man has taken a three or four years course, from a reputable medical institution, his diploma should be a passport all over America.

For each state to have an examination board, would make it unnecessarily trying, and mortifying to the individual who does possess a diploma which is recognized by all States. The quacks will rapidly flee when they are compelled to present a diploma, take their oath and present facts to substantiate that they have served a three- or four- years course. Nothing more effectual than this is needed. The University of Michigan does wrong in charging more to those not residents of the State. The fee of the medical department of the University of Michigan is far too low. It should not be less than $140 per year. Weed out the cheap, and inferior medical colleges. Compel an entrance examination, comprising a Grammar School education. Suppress the dispensaries not connected with medical colleges. Pass these laws, and have them executed promptly and a genuine good will be accomplished. Some means of restricting foreign doctors from coming in and reaping the harvest, is needed. My suggestion would be not to allow a foreign doctor to practice, until he has been a resident of America for two years. We certainly need a protective tariff, restricting the unlimited augmentation of foreign doctors. I hope DR.

F. R. BOYD will mollify the rancor of his heart. I fully agree with DR. J. V. STEVENS.

J. H. DE WOLF, M. D.

1607 Mulberry St., Baltimore, Md.

LIPPIA MEXICANA IN BRONCHIAL AFFECTIONS.

Having had my attention called to Lippia Mexicana through a sample of the concentrated tincture of the drug furnished me, I determined to give it a trial in a case of troublesome cough, due to bronchial irritation, which had been annoying the sufferer night and day for weeks in spite of a variety of remedies directed against it. The effect was magical. The cough was almost immediately relieved, and within three days not a trace of it remained.

I have since tried the drug in similar cases, with such uniformly good results that I have come to the conclusion that for irritation of the bronchial lining Lippia Mexicana is without an equal among the drugs at our command. It seems to act as a combined demulcent and anodyne.

JOHN W. FRANCE, M. D.

DUNKIRK, IND.

During the recent investigation of the Ruttan Smeade system of heating, ventilating and disposal of excreta, the Wayne County Medical Society resolved itself into a sort of committee of the whole, for the purpose of looking into the workings of the system as it is in operation in the public schools of this city. In the course of their examination it is reported that a certain aged member, imbued with the fervor of the scientific enthusiast, crawled on his hands and knees into the storage chamber, where he broke off a piece of the desiccated contents, and after sniffing it himself invited other members to apply the same reliable method of investigation. The consensus of opinion was such that the sample was returned to the chamber, and the original intention of adding it to the cabinet of curiosities in the gentleman's parlor, was not carried out. We are glad to notice that a check has at last been put upon the inveterate practice of specimen-taking by tourists.

A Philadelphia school-boy gave the following composition on the subject of a physiological lecture to which the school had been treated: "The human body is made up of the head, the thorax and the abdomen. The head contains the brains, when there is any. The thorax contains the heart and the lungs. The abdomen contains the bowels, of which there are five, a, e, i, o, and u, and sometimes w and y."

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., DEC. 26, 1887.

Editorial.

DEATH OF DR. ALONZO B. PALMER.

When the news of the death of his old colleague, DR. GUNN, was brought to DR. PALMER, a few weeks ago, he heaved a sigh and quietly remarked "And the message will soon come to me too." It came during the night of the 23rd inst., and the spirit which animated the form of the indefatigable worker and the enthusiastic teacher, took its flight. It will be difficult for those of our readers who have attended the University of Michigan, to realize that this embodiment of physical and mental energy, so apparently tireless, never failing to keep his own schedule appointment and always to be depended on to fill the vacancy caused by the absence of a colleague, is dead. The weight of increasing years seemed not to embarass him, his energy and zeal making so light of what is to most men a burden, that the idea of death associated with him seemed incongruous.

> "Though he looked old, yet he was strong and lusty,
> For in his youth he never did apply
> Hot and rebellious liquors to his blood;
> Nor did not with unbashful forehead woo
> The means of weakness and debility;
> Therefore his age was as a lusty winter,
> Frosty, but kindly."

DR. PALMER was born at Richfield, Otsego Co., N. Y., on October 6th, 1815. He was graduated from the College of Physicians and Surgeons of the Western District of New York, in 1839. He came to Michigan the same year, locating at Tecumseh, where he practiced twelve years, when he removed to Chicago. It was as City Physician in that city that he did the heroic service in the epidemic of Asiatic cholera, of 1852, which made his name famous throughout this country. In the same year he received the appointment to the chair of materia medica, therapeutics and diseases of women and children, which he filled until 1860, when he was made professor of the theory and practice of medicine, which position he occupied until the time of his death. He served for a short period as surgeon of the 2nd Michigan during the war of

the rebellion. He was ranking surgeon in Richardson's brigade at the first battle of Bull Run, and dressed the first wound inflicted by the enemy at Blackburn's Ford, on July 18th, 1861.

Although his professional work was confined chiefly to teaching, DR. PALMER was not indifferent to professional matters outside of the college, and when he entered into medical politics he did so with characteristic vigor. He served a year as president of the Michigan State Medical Society, and repeatedly filled important positions in the American Medical Association, including the vice-presidency and chairman of the section on practical medicine.

DR. PALMER was what might be called an extremist on the subject of alcohol, and was instant in season and out of season in combatting the use of the article, both as a beverage and as a medicine. His temperament permitted his being carried to a degree in his opposition which was scarcely warranted by the scientific status of the question, although his thorough familiarity with the literature of the subject, coupled with the earnestness of his nature, qualified him for a very strong defense of his position and made him a formidable antagonist of the drug.

DR. PALMER was an unrelenting foe to homœopathy, and his brochure on "Homœopathy—What is it?" presents an array of arguments against that system which its warmest supporters have essayed in vain to successfully answer. Into his fight against homœopathy, as into everything else upon which he entered, he threw his whole energies, and closing his eyes to anything of good which the object of his attack might contain, he hurled himself bodily against it. The wisdom of his zeal in this direction has been questioned, but he was half-hearted in nothing.

As a teacher, DR. PALMER was forcible and impressive, bringing to his lectures a ready flow of language and the qualifications of a ripe scholarship. While possessing few of the graces of oratory he, nevertheless, succeeded in holding the close attention of his students, to upwards of twelve thousand of whom he lectured during the course of his career, in the University of Michigan, the Berkshire Medical College, of Massachusetts, and Bowdoin Medical College, of Maine, in which latter institutions he lectured for a number of years during the vacations of the former.

DR. PALMER was an earnest man and very positive. He, therefore, had his enemies as well as friends, but there is not an enemy, whose heart is in the right place, from whom the news of his death will not wring the expression if not the actual tear of genuine regret, for he was a foeman worthy of any man's steel, and he never descended to guerrilla warfare. There was nothing sneaking, mean or malignant about him, and he was always ready to take an opponent warmly by the hand. If he erred the fault was of the head and not of the heart, and no man stood always more ready than he to meet an enemy half-way in a reconciliation. He was the soul of personal honor, rectitude and purity, and his faults, if they were faults, arose from the positiveness of his character.

The cause of DR. PALMER'S death was cystitis, consequent on enlargement of the prostate, from which he had been suffering for several years.

THE VENTILATION PROBLEM.

Any kind of ventilation is good, but some kinds are better than others. The introduction of a system of heating and ventilation of the public schools by the authority of the school boards, in which system the excreta from the teachers and children is retained in drying rooms in the basement, has called the attention of the doctors and of the community at large to this subject. Numerous committees have been appointed by school boards and by medical societies to investigate the matter.

The school-board committees, when appointed after the new system has been adopted and in use, have been naturally expected to report in favor of the system, and to sustain the board through a favorable report, while the medical society report is less trammelled by any obligations. We have had a more or less amusing instance of this in the report of a committee recently appointed by the Detroit school board to investigate the new system. This committee, after having converted a doubting Thomas or two, by leading them around by the nose, as it were, (who knows but that they may have had the all prevalent nasal catarrh at the time), brought in an apparently favorable report, but between the lines can be read the real meaning of the committee, which is adverse to the storage system of excreta in the building. The committee proposed:

(*a*) Rapid and perfect desiccation by additional heat.

(*b*) Chemical disinfection.

(*c*) Frequent removal of the material from the vault.

It will be seen from this, that there was a condemnation of the storage system.

The report of the Wayne County Medical Society is still more emphatic in its condemnation of the storage system of the management of excreta. It would be the part of wisdom for the school boards throughout all the States to accept the scientific determinations of inspectors, rather than to be so carried away by the many good points in both the heating and

ventilation, as to adopt any plan of storing the excreta of the large number of pupils who attend our public schools.

We look with interest to the forthcoming report of a committee of our State Board of Health on this subject.

Notes.

DR. BRAXTON HICKS, of Guy's Hospital, has the following on the subject of abortion, which goes to show that the crime is not peculiarly American: "The production of abortion is, I regret, rather extensively regarded by the married public as not only venial, but ordinary and proper, if pregnancy should interfere with their arrangements. One is coolly asked to produce abortion for the veriest trifles—because it interferes with the autumn holiday, or the season, because of the disagreeables of pregnancy and labor, for trifling sickness, or because the husband, or both, do not like children."

It was JENNER who said that fame was but the gilded butt for the shafts of envy. SIR MORELL MACKENZIE can probably respond to the sentiment. Here is one of the shafts which he has received from "One of the German Secret Union:" MORELL, fy! thou curmudgeon, thou wilt-be doctor, thou art a bungler! Be by no means proud of the confidence of our Crown Prince; it is now only pity with thee, thou dunce, thou block-head, thou ass. Therefore, thou huddler, be on guard, when thou travellest through Germany again, thou knave!

The prevalence of cancer in this country is quite alarming, and it is on the increase. In New York city, in 1875, the deaths from this cause amounted to 400 per million of inhabitants. In 1885 the rate had increased to 530 per million. According to the Reports on Vital Statistics of the Census of the United States, of 1880, the proportion of deaths from cancer to the total number of deaths reported from known causes, was 36.68 to the thousand.

WANTED.—Some speedy and effective method of settling a molehill-mountain difficulty between J. MINIS HAYS and JOHN V. SHOEMAKER, both of Philadelphia. Any method which does not involve the use of the printer's ink, will be hailed as a blessing to the profession. Apply for reward to W. B. MERRILL, Managing Editor, Philadelphia "Press."

Book Notices.

THE PRINCIPLES AND PRACTICE OF MEDICINE. By the late Charles Hilton Fagge, M. D., F. R. C. P., Physician to and Lecturer on Pathology at Guy's Hospital; Examiner in Medicine in the University of London; Senior Physician to the Evelina Hospital for Sick Children, etc. Including a Section on Cutaneous Diseases, by P. H. Pye-Smith, M. D., F. R. C. S., Lecturer on Medicine at Guy's Hospital; Chapters on Cardiac Diseases, by Samuel Wilks, M. D., F. R. C. S., Physician to Guy's Hospital and to the Royal Hospital; and Complete Indexes, by Robert Edmond Carrington, M. D., Assistant Physician to Guy's Hospital, London. Volume II.
Philadelphia: P. Blakiston, Son & Co.
Detroit: D. O. Haynes & Co.

Those of our readers who have possessed themselves of the first volume of this valuable work will be pleased to learn that the second volume is now ready. We took occasion in our notice of the first volume, to speak in terms of great praise of this work, and our admiration of it is increased by the second volume. The author devoted the last twelve years of his remarkable life to its preparation, during which time the exhaustless material of the great London hospitals was at his disposal. He died before his manuscript reached the hands of the printer, but its progress through the press was superintended by competent minds, and the posthumous work is a worthy monument to the memory of one of the greatest physicians of this century. DR. FAGGE was a remarkable man and his early taking off was a calamity to the medical profession. The work which he has left behind him is, in some respects, the best work on the practice of medicine ever written. Probably no other treatise on its subject is so thoroughly original or contains so much of the personalty of its author, and at the same time showing such a familiarity with all that is transpiring among his contemporaries. The book is both a mirror of the most advanced thought of the times and an expression of the mind of one of the most painstaking clinical workers, and most conscientious observers of any age. Not a statement is made in it for the correctness of which the author cannot vouch from his own experience. The work has been pronounced to be the most scientific and philosophical of all treatises on the healing art, and we cannot dispute the assertion.

PRACTICAL MICROSCOPY, A COURSE OF NORMAL HISTOLOGY FOR STUDENTS AND PRACTITIONERS OF MEDICINE By Maurice N. Miller, M. D., Director of the Department of Normal Histology in the Loomis Laboratory, University of the City of New York. Illustrated with One Hundred and Twenty-six Photographic Reproductions of the Author's Pen Drawings.
New York: William Wood & Co.
Detroit: John Macfarlane.

No one can look through this book without being struck with its singular adaption to the

end it has in view—the preparation of the student for the more exhaustive and advanced works on histology, of which there are many before the profession. It assumes that he has a fair knowledge of gross anatomy but knows nothing of histology, and with the skill of the experienced teacher leads him into the mysteries. We know of no work better adapted to the requirements of the student or of the physician who,not having enjoyed the advantages of the modern laboratory during his student days, desires to avail himself of the aids which these institutions afford the practitioner. The illustrations are very lucid and it is somewhat refreshing to notice that they are not of the stereotyped assortment which have done service for so many years in so many other publications.

Cyclopedia of Obstetrics and Gynecology, volumes VI, VIII, XI, and XII.
New York: William Wood & Co.

True to their promise the publishers have completed this comprehensive work during the year in which it was begun. The volumes have not appeared in numerical rotation, but as each has been complete in itself this fact has not caused any inconvenience. In our notices of previous volumes the nature of the work has been clearly defined, and it now remains but to state that the volumes before us take up and comprehensively treat all matters on the subjects of obstetrics and gynecology not considered in the other volumes. The work as a whole is, probably, as complete as is possible in the present state of our knowledge.

An Index of Materia Medica, with Prescription Writing, Including Practical Exercises. By Charles H. May, M. D., Instructor in Ophthalmology, N. Y. Polyclinic, and Charles F. Mason, M. D., Assistant Surgeon, U. S. A.
New York: Wm. Wood & Co.
Detroit: John Macfarlane.

The very young student and he who knows absolutely nothing of Latin, will find this little book an aid. It will help the latter to somewhat successfully hide his ignorance in his prescription, but we should advise him to stick to the vernacular and thus obviate the use of stilts. The book is another of the attempted short cuts with which our literature is by no means blessed.

Medical Progress.

Gleditschine, Spurious and Genuine.—In a paper read before the Philadelphia County Medical Society, November 23, 1887, Edward Jackson, M. D., presents his latest conclusions regarding Gleditschine. Inasmuch as Dr. Jackson was one of the medical gentlemen who were deceived by the claims made for Gleditschine by its introducers, it is but fair to present to the readers of the Age, who have had placed before them his original deductions, his final conclusions. Especially since they are at variance with those first maintained:

In publishing my observations on the action of the so called stenocarpine (in The Medical News of Sept. 3, 1887), I stated:

"In studying the action of this drug, one cannot but be struck with its similarity to that of cocaine. . . . . This similarity of action raised in my mind the question, whether this new drug possessed any power which would not be possessed by a solution of cocaine to which had been added a portion of one of the stronger mydriatics, as duboisine or hyoscyamine."

It seemed to me then, however, that the drug did "possess certain powers, in degree at least, peculiar to it. My impression is that the solution used, said to be two per cent. solution, is a more powerful anæsthetic than the four per cent. solution of cocaine."

I also thought that while its influence over accommodation was more powerful than that of homatropine, that the recovery of the accommodation from its effects was more rapid than from any previously known mydriatic, except homatropine.

In this last respect I soon found I had been in error. A few days after that paper was published I came across the records of some experiments which I had made nearly six years ago, and some of the results of which I reported in a paper read before the Medical Society of the State of Pennsylvania, in 1882; and among them some trials of weak solutions (1 to 1000 and 1 to 2000) of duboisine and hyoscyamine in my own eyes, where the recovery corresponded exactly to the recovery observed after the use of the alleged new drug. This discovery redoubled my suspicions. I then took twenty-five grains of the solution, dried it over sulphuric acid, and weighed the residue, which I gave to Dr. Henry Leffmann, who dried it still further, and weighed it again; its weight, as reported by him, was 1.62 grains. This demonstrated that the so-called two-per cent. solution of "stenocarpine" was not what it purported to be.

In my paper, before referred to, I objected to the name stenocarpine as probably not indicating the real source of the drug, and pointed out that Mr. Goodman's description of the tear-blanket tree corresponded with that of the *Gleditschia triacanthos*, or honey locust; and stated that "extracts made from the leaves of the honey locust growing near Philadelphia, failed to exhibit any anæsthetic or mydriatic properties." About the same time I wrote to Mr. Goodman asking for specimens of the leaves; and he promised them, but they have not yet been received. Soon after this, however, I obtained specimens of leaves from Jefferson County, Texas, which were pronounced those of the honey locust by Dr. J. T. Rothrock, Professor of Botany in the University of Pennsylvania, who had been the first to suggest to me that the honey locust might be the tree described. These leaves proved as inert as those obtained in this vicinity.

Shortly after this Dr. J. H. Claiborne, Jr., published in the Medical Record of Oct. 1, 1887, a detailed and illustrated account of the honey

locust, stating that MR. GOODMAN and DR. SEWARD had fully identified it, as the source of the new local anæsthetic, and proposing, therefore, to call the "new" alkaloid Gleditschine. The publication of the above facts indicating the fraudulent character of the "stenocarpine" solution was delayed until some of the genuine Gleditschine could be studied. But, simultaneously, MR. F. A. THOMPSON, in the MEDICAL AGE of Oct. 25th, and DR. JOHN MARSHALL, in the Medical News of Oct. 29th, published analyses of the alleged stenocarpine--Gleditschine solution, by which the fraud was fully exposed. They proved that unquestionably the solution contained cocaine and a member of the atropine group. The latter is *no'*, however, atropine itself, as might be inferred from their papers; but on account of the brevity of the paralysis of accommodation it produces, must be, I think, hyoscyamine, duboisine, or daturine.

When talking with DR. HENRY LEFFMANN about Gleditschia triacanthos, he told me that he thought that it had been the subject of investigation by the late DR. B. F. LAUTENBACH, who had published something about it in the Philadelphia Medical Times. On looking into the matter, I found that in the issue of that journal for November 23, 1878, just nine years ago to-day, DR. LAUTENBACH had published a brief communication entitled "Gleditschin—A New alkaloid," with the promise that in a later publication this subject would be treated more fully. The promise remained unfulfilled, doubtless on account of the death of this talented, original investigator. But the brief preliminary contribution is of that substantial character which always, sooner or later, proves its value. I make from it the following extracts:

"When, however, an alcoholic extract of the unripe seeds and the portions of the fruit immediately surrounding these (the remainder of the unripe fruit is practicolly inert) was used, very active poisonous effects were observed. In from five to twenty minutes the frogs were in a profound state of stupor. No reflex movements could be excited by any of the known means, though at that time the motor nerves still remained irritable. This loss of reflex activity was not due to loss of function of the sensory nerves through the direct action of the poison on these structures, as, after ligature of all the bloodvessels of a limb, irritation of that limb failed to produce reflex movements when the animal was poisoned with the extract. The heart continued to beat for hours after these symptoms appeared. If a not too large dose was given, the animals recovered after being in this state for twenty-four hours." . . "To isolate the active principle the portions of the fruit used were digested in absolute alcohol and ether, tannin precipitated with lime, and the alkaline filtrate neutralized with dilute sulphuric acid. The dense precipitate thus obtained was allowed to crystallize. The crystals were dissolved in water, and the alkaloid precipitated by lime." . . . "The crystals which were obtained were elongated rhombs, almost completely insoluble in water, but readily soluble in alcohol. They leave no ash when heated on platinum. The alcoholic solution is alkaline, and with dilute sulphuric acid gives a dense white precipitate, . . . composed of elongated rhombic crystals, whose angle, however, was much smaller than that of the Gleditschin crystals. Both the original crystals and the sulphate produced in frogs and toads the symptoms before described."

"Gleditschin, as I propose to call this new alkaloid, forms salts with sulphuric, nitric, hydrochloric, acetic, and tannic acids. All these salts crystallize in modifications of the rhomb." * * * "The first symptom produced in frogs is a state analogous to sleep. Following this, rapid abolition of reflex activity takes place, and respiration ceases. The galvanic irritability of the nerves is much diminished."

After reading this account by DR. LAUTENBACH of the substance clearly entitled to the name Gleditschin, I endeavored to obtain some of the unripe fruit, in which, according to DR. LAUTENBACH, the drug is to be found. With some difficulty and considerable delay, a peck of the fruit was obtained, but the pods and seeds were most of them very nearly mature. However, MR. JAMES A. KYNER, Demonstrator of Chemistry in the Polyclinic, following in the main the method of DR. LAUTENBACH, obtained from them a very small amount of a solution of what we believe to be the sulphate of the true Gleditschin. On evaporation it deposits crystals of a narrow rhombic form. When ammonia is added it gives a precipitate, which presently crystallizes in broader rhombs. On the frog it produced the symptoms narrated by DR. LAUTENBACH, though my supply of the solution gave out before the stupor was complete. The symptoms reached their height in fifteen minutes after the hypodermic injection of the solution, were passing off in an hour, and had disappeared entirely in less than three hours. *This solution freely applied to the conjunctiva produced no anæsthesia or dilatation of the pupil whatever.*

The analyses and tests above referred to, with several others that have since been published, have pretty well disposed of the alleged new local anæsthetic and mydriatic; and Gleditschine has lost its interest for the ophthalmic surgeon. But the incident, disagreeable as its ending may have been to some of us, is not without its useful lessons.

First. It is shown that such a fraud cannot be carried far even with a drug as difficult of positive chemical identification as cocaine. And every such attempt at fraud can only make more brief the period, and decrease the profit, of succeeding attempts.

Second. It has been demonstrated that cocaine can produce anæsthesia through the unbroken skin; although, as I have pointed out (loc. cit.), this is extremely superficial; and

"To make a painless incision in tissues anæsthetized in this way, one must do it by repeated superficial cuts with the knife, keeping all the time the cut surface bathed with the solution."

Third. Attention has been drawn to the *Gleditschia triacanthos*, and the genuine Gleditschine discovered and studied nine years ago by Dr. Lautenbach, but recently in a fair way to be forgotten. And in the direction of a further study of this substance lies the probable path of profitable future investigation. The leaves have been proven practically inert, and for several months it may be impossible to obtain specimens of the unripe fruit. But other parts of the plant might be tested for it. In

the MEDICAL AGE of November 10th Dr. CRULL states that he has cured gleet with a decoction of the bark of the root of the thorny honey locust (the more common variety), and that taking a tablespoonful of the decoction himself, "caused nausea, giddiness, dimness of sight, cold perspiration, and a prickly or smarting sensation of the tongue and throat. These symptoms continued for nearly three hours, when they gradually abated. The evacuation of the bowels the following morning was very bilious and watery."

THE HYGIENIC TREATMENT OF STRUMA.—DR. WILLIAM ALEXANDER, of Liverpool, records, in the Liverpool Medico-Chirurgical Journal, his experience in the treatment of struma at the Liverpool Workhouse Infirmary. At this hospital the so-called strumous ophthalmia, and strumous disease of the joints and glands constitute the staple diseases of the children patients.

For the treatment of strumous ophthalmia a country house was selected near the city, and a careful, competent and zealous nurse appointed; and to this place the children were sent as soon as the acute symptoms of ophthalmia had passed away. Here the local treatment of the eyes was continued, being aided by the fresh air, plenty of exercise, and more wholesome surroundings. The treatment seems to have been successful, though the author's language is somewhat obscure: "Since that time only a few cases of ophthalmia percolate the Workhouse Infirmary, to be finally cured at Maghull (the place of the country house)." But he further says that no eyes are now lost, and that not many children exhibit those patchy eyes that were at one time an almost certain result of residence in workhouses. DR. ALEXANDER concludes that "a thorough cure of strumous ophthalmia by country air is the only remedy worth considering in chronic cases. The part of the country to which the child should be sent is not a matter of any great importance, provided the place is healthy and not too cold."

In regard to surgical treatment of strumous glands of the neck, DR. ALEXANDER looks upon this with more favor as his experience grows, especially taken in connection with the medicinal and hygienic treatment. "The most favorable case for operation is when a single gland inflames and is about to suppurate. By a small clean incision the capsule of the gland is exposed, the capsule cleared, and the whole gland removed entirely. The incision is accurately closed, the hole whence the gland was taken is drained, and a scarcely perceptible scar takes the place of a sinus that would under expectant treatment have kept open for months, leaving a puckered cicatrix at the end of that time. Any enlarged movable glands are also removed at the time of operation." When the capsule of the gland is so thinned or adherent to surrounding structures that it cannot be removed entire without a formidable operation, it is opened by the usual small incision, the pus evacuated, and the capsule carefully dissected out. The cavity is then dusted with iodoform, provision made for drainage, and the wound carefully closed. To attack the very bad cases of scrofulous glands of the neck, the surgeon must, of course, be very certain of his anatomical knowledge of the neck, so as to avoid important structures in opening the sinuses that generally lead down to cavities filled with strumous debris. DR. ALEXANDER uses the finger as a director and a narrow gouge an an excavator; the cavity is cleared out and explored, especially as to any communications existing between it and other sinuses. If such communications exist the sinuous tracts are well cleared out, opened up, and filled with carbolized-oiled lint, iodoform gauze, or some other antiseptic material. If irritation and inflammation are produced by this procedure a warm linseed poultice gives great relief, but should be removed when the inflammatory symptoms have subsided, usually in twenty-four or forty-eight hours, and the disinfecting treatment be resumed until the cavity heals from the bottom. Recurring glandular enlargements and abscesses, near to or remote from the seat of operation, should be attached in the same way, cleaned out and freely drained; all the sinuses and deposits of cheesy material must be completely eradicated.

Simple glandular swellings, indolent and firm, should never, in the opinion of DR. ALEXANDER, be attacked by the knife. However formidable they look, he says, they disappear very rapidly under the medicinal and hygienic treatment he describes. Internally he uses the syrup of the iodide of iron, and externally the linimentum potassii iodidi cum sapone. "Blistering by iodine paint, or the application of the tincture externally, seems to be harmful rather than beneficial. Many of these glandular swellings arise from the irritation of the throat or scalp or teeth," and in the treatment of them he would avoid all irritation. The neck should be kept comfortably warm by some soft clothing, or by cotton-wool. The liniment is rubbed in very gently, but effectually, before a fire, and the cotton-wool applied as soon as the inunction is done. A thin and anæmic patient of course needs cod-liver oil and good food; but if the patient be plump and fat, as is sometimes the case, the oil is not necessary, and the food should not be too oleaginous. Very stimulating diet should be avoided in all cases. "But the diet is a secondary consideration, and depends upon the extent to which the hygienic treatment can be carried out."

However well it may be built and appointed, a hospital is the place for the hygienic treatment of struma. "A sedentary, lazy, well-fed life is the least productive of an active and efficient circulation of either blood or lymph. Patients with glandular swellings not requiring surgical treatment should move about as much as possible in the open air, and receive medicinal treatment at home rather than in a hospital. The hygenic treatment, to be of marked benefit, should last over two months, and more. While over-fatigue is to be avoided, the patient should take as much exercise in open air as possible, the throat being well protected from wind and rain. While a low-lying country is not so well suited for these cases as a hilly one, and while the sea-coast is preferable to the inland, yet it must be said that the country, whatever it may be, is better than the city, and infinitely better than the wards of a hospital.

In the hygienic treatment of strumous joint disease time, next to situation, is the chief element of success. Surgeons who have read DR. ALEXANDER'S Jacksonian prize essay on hip disease will read with interest what he has to say of the hygienic treatment of strumous joints. He finds that the sanitarium that is suitable for strumous glands does not agree so well with cases of strumous joint disease, and he is inclined to look upon the difference rather as indirect and accidental than as attributable to purely climatic influences. Of course, locomotion being impaired in cases of strumous joints, a hilly or mountainous country is less suitable for them than is a flat country. When the joint disease is so far cured as not to seriously interfere with locomotion, the patient will do well almost anywhere in the country. When the patient is sent to the country from a hospital after a long and acute illness the change is, of course, very great, and is aptly compared to the cold morning plunge of a healthy person. He should be well protected, and at first the stay out in the open air should be limited. Such a patient should not be subjected to hospital discipline for form's sake.—*The Journal of the American Medical Association.*

THYMOL IN DIABETES MELLITUS.—Isolated cases of disease are valuable on account of their rarity or because they have been thoroughly studied; doubly so when they unite both of these qualities. Diabetes mellitus can scarcely be called a rare disease. Its diagnosis is readily made and the details of its dietetic management are, with minor exceptions, generally agreed upon. In its medicinal treatment, however, the number of drugs that may be employed is suspiciously large, a fact doubtless owing to inaccurate observations. The proper study of a case of diabetes may be compared to an elaborate physiological experiment. In fact, it is nothing else. Not only does it demand that the quantity of urine and its percentage of sugar be estimated, but also that careful records be kept of the body weight and the amount and quality of the ingesta, and this work is merely preliminary to the study of the effect of any of the so-called remedies for this disease.

To appreciate properly the effect of a drug in this affection, it should be administered, not only while the patient is on an exclusively proteid diet, but also while he is partaking of carbohydrates, for, in the former case, the improvement or cure, may be ascribed to the diet when it is due, in whole or in part, to the diet.

In the recently established therapeutic clinic of the University of Siena, PROF. BUFALINI has thoroughly studied the action of thymol in two cases of diabetes, the object of his investigation being two-fold. He first endeavored to ascertain the effect of thymol upon the excretion of sugar, and, secondly, whether its well-known power as an intestinal disinfectant would exert a favorable influence upon the condition known as acetonæmia.

To determine the former question, the patients were first placed upon a mixed diet of soup, meat, eggs, bread, coffee, milk and wine, the amount of each being given by weight. The quantity of feces and urine, the density of the latter and its percentage of sugar were also ascertained, as well as the bodily weight in one case, the other being too feeble to be moved. After from a week to ten days of such observations, thymol was given in doses of 30 to 45 grains per diem and continued long enough (to the two cases 12½ drachms were given in 18 days) to demonstrate that, while the patient is on a mixed diet, this substance exerts no appreciable effect upon the quantity of urine, its specific gravity, or its percentage of sugar.

When the patient is on an exclusively proteid diet, the case is different and requires some explanation. It is a common observation that as soon as a diabetic is placed upon an albuminoid diet, the sugar in his urine will diminish, perhaps entirely disappear. A persistence in this regimen is, however, apt to be followed by digestive disturbances, with abnormal intestinal putrefaction, and a speedy reappearance of the absent, or increase of the diminished sugar. This occurred in one of BUFFALINI'S cases. Under a proteid diet continued for one month, the sugar had entirely disappeared. Continuing the same diet, gastro-intestinal disturbances (anorexia, vomiting, borborygmi, diarrhœa) set in and were soon followed by a reappearance and steady increase of the sugar. At this juncture it occurred to BUFFALINI to administer thymol, he believing with his colleague, MARTINI, and with the writer of this article, that it is the best known intestinal antiseptic. The result was immediately favorable and the conclusion with reference to the drug is that it is not only useful but necessary in cases of diabetes placed upon an exclusively proteid diet. No deleterious effects from the use of thymol were observed by BUFALINI and none need be apprehended, although, in the writer's experience, smaller doses (from ʒ ss to ʒ j) are quite efficient in abnormal conditions of intestinal putrefaction.

The second object of BUFALINI'S research was to test the effect of thymol upon the condition known as acetonæmia. Both of these patients presented all the symptoms of this condition. They were somnolent, greatly prostrated, and they exhaled the odor, and their urine gave the reactions of this substance. Under the use of thymol, the characteristic odor of the breath diminished and the reactions of acetone in the urine became faint, while the general condition improved. BUFALINI holds that these results of the thymol treatment establish the fact that acetone is formed in the intestine by abnormal fermentation of the sugar excreted by this channel, and that the ferment is an altered gastro-intestinal mucus. —*Med. News.*

THE EMPLOYMENT OF SACCHARIN.—This substance is now prominently before the profession, and the following memoranda, taken from the British Medical Journal, October 15, 1887, contain information that it may be well to remember: "Saccharin forms a white crystalline powder, which fuses at a temperature of 392° F., when it undergoes partial decomposition, giving off a characteristic odor. It is but slightly soluble in cold water, somewhat more so in warm water, its solubility being, however, greatly increased by the presence of alkalies or their carbonates. Alcohol also furnishes a good solvent for saccharin, particularly 80-per-cent. solutions, and it is likewise freely soluble in

warm glycerin. Its most characteristic property is certainly its sweetening power, possessing nearly three hundred times that of cane-sugar, for while a solution of cane-sugar loses its sweetness when diluted to 1 in 250, a sweet taste is still perceptible in a watery solution of saccharin containing 1 in 70,000. As sugar is a carbo-hydrate, its solutions are liable to undergo fermentation: but as saccharin is an aromatic derivative, it is not liable to undergo this decomposition, and hence it may be freely employed without the fear of destructive fermentation occurring. But, besides this, as saccharin possesses considerable antiseptic powers, its use in medicine may often be attended with advantage—as, for example, in cases of alkaline fermentation of urine, upon which it has been shown to exert a strongly retarding influence. Stutzer, Aducco, and Mosso, from their experiments with this body, agree in the belief that it is innocent, so far as the organism is concerned; and Stutzer's experiments further show that its presence has no retarding influence on the digestion of ether proteids or hydrocarbons. However administered, saccharin soon finds its way into the urine unaltered, this fluid not being altered thereby. And, while producing no injurious effect on the system, it is found to agree both with invalids and healthy individuals, and no anxiety as to its effect upon the health need be felt, even when taken for lengthened periods. As much as thirty to eighty grains have been administered daily without producing any injurious effect, even upon the appetite. Saccharin may therefore be said to be neither a food nor a poison; but from its peculiar properties it may often be employed therapeutically with advantage. Thus it may with benefit wholly or partially replace sugar in the diet where the latter is contraindicated, as in diabetes, general obesity, torpid liver, marked gouty diathesis, glandular diseases of children, and in certain senile affections in which various cystic and genito-urinary disorders occur. From half a grain to a grain and a half will sweeten a cup of tea or coffee. Small saccharin tablets, indeed, have been prepared for this purpose, and these are now being supplied, it is said, to the German army; for in a very small bottle of scarcely appreciable weight a soldier can carry enough saccharin for a week's supply. There is a wide field for the application of saccharin to the production of sweetmeats and preserves, and in disguising the taste of bitter and nauseous preparations, as well as in preserving the properties of others. But it must always be carefully borne in mind that saccharin is to be regarded as a condiment, and not as a food like sugar, and can therefare replace sugar only in exceptional cases.—*Med. Record.*

Ext. Viburnum Prunifolium in Arresting Abortion.—Perhaps the following concise statement of facts relating to the successful use of the above drug may be of interest.

A. L., medium size, very fair, and an extremely good-looking country young lady of a healthy physique, who had always enjoyed very good health, "never had a days illness in her life" (the above applies equally to her husband), was married at the age of 25, on the 7th October, 1882, miscarried on January 6th 1883, and removed to London shortly afterwards, when she came under my care, and has been so ever since She aborted at seven months, on October 19th, 1884; and again on August 19th, 1885, this time at five months, and of twins, the children in each case being born alive, but surviving their birth only a few hours. She was after this last abortion, persuaded to submit to an examination with the speculum, which neither on that or three subsequent occasions revealed any thing, the uterus being quite normal, and the os perfectly free from ulceration. The urine had been repeatedly examined for albumen, but not a trace was ever discovered, and microscopical examinations revealed nothing. She then went into the country alone for several weeks, and on her return almost immediately again became *enciente*; as had been before arranged, she at once communicated the fact to me, and early in February, 1886, commenced taking the extract in the form of a four-grain pill three times a day. This she continued regularly (she says she never missed a dose, and I quite believe her) until September 2nd, 1886, when she was again prematurely confined at seven months of a living male child, which she was unable to nurse, not having any, the slightest show of, milk; after all her previous essays she had a good supply, indeed, after the twins, it was rather troublesome to get rid of; she, as before, made a good recovery, and the child lived until it was four months old, when it succumbed to an attack of acute bronchitis. In January, 1887, she found she was once more *enciente*, and at once again commenced taking the same dose three times a day, and she continued doing so until October 23rd, when she was confined of a full-grown, healthy, female child, which she is now nursing, having a remarkably good supply of milk, and at the time of writing (November 15th) both mother and child are progressing remarkably well. I have omitted saying that from the age of fourteen the monthly periods were always remarkably regular, lasted three or four days, and were free from pain. I can offer no remarks on the *modus operandi* of the extract, I only know my patient has unbounded confidence in "those pills," and I shall have equal confidence in trying the extract in any similar case.—Carr Holstok Roberts in *British Med. Jnl.*

Cocaine as an Anti-Emetic.—Dr. J. E. Jennings, of Aspinwall, sends the following communication: As is well known, vomiting is one of the most constant symptoms of yellow fever. Occurring early, it marks the whole history of the disease, and in most severe cases gradually becomes more persistent until the characteristic 'black vomit' appears. All writers on the subject agree in the statement that the 'black vomit' is a very grave symptom; hence any drug that can prevent or check this symptom would aid us very much in the treatment of this truly terrible disease. Lime-water and milk, small pieces of cracked ice, iced champagne, lime-juice, carbolic acid, pepsin, ingluvin, external applications, etc., seem to exert a favorable influence upon the vomiting, but up to the present moment no remedy has been brought to the notice of the profession that could be regarded as anything like a posi-

tive anti-emetic in this disease. Knowing the power of cocaine as a local anæsthetic, DR. THORINGTON, physician for the Panama Railroad, and myself resolved to test its value as an anti-emetic in yellow fever.

"The following cases illustrate very happily the results we have obtained from the use of this drug.

"CASE I.—MISS. L——, Spanish, aged twenty-three, arrived in Aspinwall from Spain four months ago. When called in to see patient, she was found to be in the second stage of yellow fever. The following day 'black vomit' appeared, for which we ordered ten minims of a four per cent. solution of cocaine to be given with a little water every hour. The effect of the medicine was at once apparent, and after the second dose all vomiting ceased. Patient recovered.

"CASE II.—MISS. H——, Spanish, aged nineteen. Has been living in this city for the past seven months. This patient was thought by the family to be suffering from malarial fever, until the fourth day, when her disease was recognized by the appearance of black vomit. At this time cocaine was administered as in Case I., with like success.

"CASE III.—MR. S——, American, aged forty-nine. Two months after his arrival in this city he was taken sick with yellow fever of a very severe type. Black vomit appeared at the end of the first twenty-four hours, but was at once checked by the administration of small doses of cocaine. In this case it was noticed that a considerable quantity of coagulated blood was passed from tne bowels. Patient died on the fourth day, there being complete suppression of urine.

"CASE IV.—CAPTAIN N——, Welshman, aged forty five. Was taken sick with yellow fever while his vessel was discharging coal in this port. Had copious black vomit on the third day, which was controlled by cocaine. Patient recovered.

"In the above cases from two to five doses were all that were necessary to control the vomiting. The patients rested easier and seemed to relish the nourishment given them. At the same time it was noticed that the cocaine acted as a diuretic; under its influence the quantity of urine passed was somewhat increased."—*Med. Record*, Nov. 26, '87.

THE TREATMENT OF HEADACHES BY NITRO-GLYCERIN.—DR. TRUSEVICH publishes in the Ejendelnaya Klinicheskaya Gazeta a series of observations on the effect of nitro-glycerine on headaches. He adopts in the main the classifications of headaches made by DR. DAY, whose work he translated into Russian, in which language it has already gone through two editions. The preparation generally used was a 1-per-cent. alcoholic solution, though in a very obstinate case the 10-per-cent. solution was used, two drops being first given, and after an interval of two minutes three more. The result of this heroic medication was that the patient, a girl of fifteen, became pallid, and her pulse very weak; however, a little water and some smelling salts quickly revived her, and she was none the worse. The nitro-glycerin had no effect on the headache, which was of a persistent character, and was probably due to some organic lesion, perhaps an affection of the cranial bones. As a rule, two or three one-drop or two-drop doses of the 1-per-cent. solution placed on the tongue at intervals of a very few minutes sufficed to arrest the headache. The conclusion arrived at was that all cases which depend entirely, or almostly entirely, on a vaso-constrictor neurosis are immediately curable by nitro-glycerin. In cases where the cerebral anæmia is partly due to deficiency or poorness of blood, milk, iron, arsenic, quinine, and other tonic remedies are of course required in addition to the nitro-glycerin. The chief indications for the successful treatment of migraine by nitro-glycerin are pallor of the face and a paroxysmal character of the pains, also their augmentation on pressure of the carotids, and their diminution when the head is lowered. In "nervo-hyperæmic headaches" nitro-glycerin is useful, but it only acts indirectly by dilating the vessels in other parts of the system, and thus relieving the congestion in the cerebral vessels. It is positively injurious in headaches depending on passive hyperæmia. On this subject, however, DR. TRUSEVICH promises a future article. As a rule, he thinks that if nitro-glycerin fails to relieve, the prognosis is probably bad, as the pain is generally due to some organic lesion, such as thickening of the fibrous coverings following chronic alcoholism or syphilis, or to some osteophyte caused by periostitis, or, lastly, to morbid changes in the cranial bones. In some headaches of rheumatic origin nitro glycerin appears to have some effect, but DR. TRUSEVICH thinks that in others massage would probably be more beneficial. When headaches are due to heart, lung, or to hepatic disease which causes passive congestion in the cerebral vessels, nitro-glycerine cannot be expected to do much good.—*Lancet.*

ARTIFICIAL RIPENING OF CATARACTS.—BOERNE BETTMAN, M.D., in the Journal of the American Medical Association says this procedure consists of gently rubbing the cornea with the blunt end of an instrument, usually a strabismus hook or iridectomy forceps. The pressure exerted upon the cornea is transmitted to the lens, loosening and splitting the still adherent and semi-opaque cortical lens fibres. These, in the course of days and weeks, become perfectly opaque. The object of the operation has been accomplished; the cataract is mature. I was very much impressed by Prof. Foster's article, and resolved to try his method whenever occasion permitted. I have used the expedient quite often, but have modified it to suit my individual tastes. Instead of rubbing the cornea, I bring the pressure to bear directly upon the lens, by pressing against the capsule with a spatula, usually employed to replace prolapsed iris. I prefer this method to the one recommended by Foster for the following reason: Trituration of the lens always follows an iridectomy. After the escape of aqueous humor iris and lens move up against the cornea; the iris contracts and the pupillary field becomes small. When the blunt instrument now is rubbed against the cornea the pressure, unless limited to the small pupillary area, will not only break down the lens fibres, but will subject cornea and the delicate iris

tissue to an unnecessary irritation. I therefore, as before mentioned, carefully pass the spatula into the anterior chamber, and if necessary behind the iris, and gently stroke and press the lens in any direction.

Great care must be observed not to exert too much pressure, otherwise a discoloration of the lens might ensue. The flat side of the instrument should always be held against the lens sursace. If tilted so as to bring the edge to bear upon the capsule, it no doubt would rupture the latter. It is unnecessary to add that the strictest antiseptic precautions are religiously adhered to, and that the eye should be fixed in case the patient shows an unruly disposition. This, however, is rarely necessary, owing to the anæsthetic effects of cocaine. The distribution of opaque lens fibres and general breaking up of the cortex can readily be seen with the naked eye during the operation. The mother-of-pearl sectors split, break into pieces, and are forced from their former positions. In the course of a few days, yea, even after twelve hours, the entire appearance of the lens has changed. Its anterior surface has now a uniform mottled appearance. When illuminated it frequently resembles a bag entirely filled with a granular mass. In successful cases it becomes entirely opaque, cutting off the yellowish reflex from the nucleus.

How to Treat the Eye, With a Cinder, or Dust, in It.—R. W. St. Clair writes the *Med. Summary* as follow:

Nine persons out of every ten, with a cinder, or any foreign substance in the eye, will instantly begin to rub the eye with one hand, while hunting for their handkerchief with the other. They may, and sometimes do, remove the offending cinder, but more frequently they rub till the eye becomes inflamed, bind a handkerchief around the head, and go to bed. This is all wrong. The better way is, not to rub the eye with the cinder in at all, but rub the other eye as vigorously as you like.

A few years since, I was riding on the engine of the fast express, from Binghamton to Corning. The engineer, an old schoolmate of mine, threw open the front window, and I caught a cinder that gave me the most excruciating pain. I began to rub the eye with both hands. "Let your eye alone and rub the other eye" [this from the engineer]. I thought he was chaffing me, and worked the harder. "I know you doctors think you know it all, but if you will let that eye alone, and rub the other one, the cinder will be out in two minutes," persisted the engineer. I began to rub the other eye, and soon I felt the cinder down near the inner canthus, and made ready to take it out. "Let it alone, and keep at the well eye," shouted the doctor pro tem. I did so for a minute longer, and looking in a small glass he gave me, I found the offender on my cheek. Since then, I have tried it many times, and have advised many others, and I never have known it to fail in one instance, (unless it was as sharp as a piece of steel, or something that cut into the ball, and required an operation to remove it). Why it is so I do not know. But that it is so, I do know, and that one may be saved much suffering, if they will let the injured eye alone, and rub the well eye. Try it.

Naphthol as an Antiseptic.—The Paris correspondent of the New York Medical Journal, says in a recent letter to that journal, that Professor Bouchard, who holds the chair of pathology and general therapeutics at the Paris faculty, was lately elected a member of the Académie des Sciences in opposition to Professor Germain Sée. Dr. Bouchard gives in his first communication to that august body his ideas on "Naphthol as an Antiseptic." It is now a long time since he introduced this agent into therapeutics, as an internal antiseptic, although it had already been used locally in skin diseases. Having studied and measured its toxic and its antiseptic powers, he found it preferable to all other internal antiseptics, on account of its feeble solubility. For the disinfection of accessible surfaces we have already plenty of good soluble antiseptic substances, but for general antisepsis one was wanted that could be introduced into the blood in sufficient doses to obstruct the microbes' action without compromising the health or life of the patient. Insoluble substances, or at least those that are only slightly soluble, are the only ones that can be employed. It is for this reason that salicylate of bismuth, iodoform, and naphthaline are used. Naphthol is only soluble in water in the proportion of 2 per cent., so that it is practically almost insoluble. What is its antiseptic value? Professor Bouchard studied this point and proved it in some eleven cultivations of different microbes, such as those of pus (*Staphylococcus albus* and *aureus*), the bacillus of pneumonia, and that of typhoid fever, and found that naphthol would prevent their development; even the bacillus of tuberculosis was affected by it. Urine and liquid fæces agitated with powdered naphthol will not ferment. The toxic dose of this substance is about 3,750 grains, but it only requires less than 40 grains of it daily to produce perfect intestinal antisepsis. It is now very much used in the Paris hospitals in cases of typhoid fever.

The Treatment of Laryngeal Cancer.—The London Lancet editorially remarks: The treatment of laryngeal cancer may be classed as either palliative or quasi-curative. The palliative treatment waits on symptoms, and its chief value lies in the performance of tracheotomy to provide a free passage of air to the lungs. It is this course which the Crown Prince has decided to follow, and we trust that it may be long before an active interference is called for in his case. The curative or quasi-curative treatment aims at entirely eradicating the disease at an early period, in the hope of permanently arresting the disease or of obtaining a long immunity from it. Its success depends upon the thoroughness with which not only the obvious morbid products, but a considerable area of apparently healthy tissue around them, can be excised. When once a cancer has developed, every week such an operation is postponed both adds to its gravity and lessens its prospect of utility. Moreover, the operation, even when reduced to its simplest proportions, is a very grave one, attended with considerable danger to life and with serious impairment of the voice. It is right to run these danger when the prospect of success is good, but as the progress of the disease both

adds to the dangers and lessens the prospect of success, the time soon comes when the balance is turned and the operation is no longer admissible.

SALOL OVER-RATED.—The value of salol in the treament of acute rheumatism would seem to have been somewhat over-rated. The results of a series of observations and experiments carried out by DR. LOMBARD, of Paris, tend to show that while salol is undoubtedly possessed of remarkable controlling power over the painful manifestations of the disease, its effect does not last more than a few hours, differing in this respect from the relief afforded by salicylate of sodium. It is surmised that salol, which is insoluble in water, is decomposed by the pancreatic juice and possibly by the bile, into salicylic and carbolic acids. It was found that when the duct of the pancreas was tied, the drug passed through the intestines as an insoluble and inert substance. This is held to account for the fact that the physiological action of salol does not increase *pari passu* with the dose given, and when more of the drug is given than can be decomposed, it passes away with the fæces. For the same reason it is, under ordinary circumstances, absolutely devoid of toxic properties and is quite free from the troublesome symptoms to which the use of salicylate of sodium not uncommonly gives rise. Its employment is therefore indicated in all cases in which it may be undesirable to administer the salicylates as well as in the sub-acute forms of rheumatism. As an antipyretic its effects were not appreciable.—*Med. Press.*

A NEW ARTIFICIAL ALKALOID.—Chemical synthesis has constructed a new alkaloid with the name of oxy-propyl-endi-iso-amylamine It is produced by the action of the hydrochloride of propyl upon di-iso amylamine and forms an oily colorless liquid, soluble in alcohol, ether, and fatty bodies, but very little in water. The salts are very soluble. The physiological and therapeutic properties of this body have been investigated by E LOUISE. The toxic dose for a dog is two decigrammes; and for a man weighing 65 kilogrammes, 13 grammes. On the nervous system it acts something like atropine, but its chief feature consists in the production of epileptic seizures and of two kinds. In moderate doses this alkaloid may be considered as a powerful cardiac tonic and an energetic stimulant of the circulation and cerebro spinal centres. In its action on the heart it approaches atropine, paralyzing the inhibitory apparatus and heightening the action of the accelerating nerves. It does not influence the cardiac muscle fibre or the intra-cardiac nervous system. Probably it excites the medullary moderating centres of the heart. The cortical representations of the vagus centres are also acted upon, and it may be that this double action accounts for the remarkable augmentation of the intravascular pressure and the marked elevation of the temperature of the body in cases of acute intoxication.—*The Lancet.*

EUCALYPTUS IN WHOOPING-COUGH AND BRONCHITIS. — WITTHAUER (Memorabilien, September 3, 1887) strongly recommends the administration of eucalyptus for whooping-cough and bronchitis. In whooping-cough he gives from five to twenty drops of a mixture of equal parts of tincture of eucalyptus and glycerin, according to the age of the child, every three hours. He also administers inhalations as follows: A piece of linen is made into a bag, in which is placed a piece of cotton on which ten drops of oil of eucalyptus is put every morning. The bag is tied around the neck of a child so as to be under the shirt, and the child is in an atmosphere of eucalyptus by day and by night.

In bronchitis, WITTHAUER gives to an adult from fifteen to twenty drops of the tincture of eucalyptus every three hours. Inhalations are given by placing ten drops of the oil in a cup of hot water, and causing the steam to be inhaled.—*Alleg. Med. Central Zeitung—Southern Med. Record.*

MENTHOL TO DEODORIZE IODOFORM.—CASTRELLE, pharmacist of Paris, has found, of all the ways devised for hiding the odor of iodoform, the following combination is the best:

Iodoform, gr. 15.
Menthol, gr. ¾.
Essence of lavender (of best quality) gtt. 1.

In addition, the hands may be washed in water containing a little lavender, brandy or essence. Cocaine may be added, when instant anæsthesia is required, as follows·

Iodoform, gr. 15.
Cocaine, gr. ⅜.

—*Bulletin Général de Thérapeutique.*

ICHTHYOL IN RHEUMATISM.—DOUBELIR reports that in the military hospitals of Moscow ichthyol has been given in eight cases of articular rheumatism, six of which were acute and two were chronic. The result was diminished pain, but continued swelling. The remedy may be given in pills or capsules containing one and a half to three grains each. Of these from six to twelve of the first and from three to six of the second may be given in twenty-four hours.—*L'Union Médicale.*

GUAIACAL.—This substance is the active principle of creasote, and is used by SAHLI in tuberculosis as follows:

℞ Guaiacali, gr. 25 to gr. 30.
Aquæ, ʒ 45.
Spirit. vini, ʒ 5.
M. To be put in darkened bottles.
Sig.—Teaspoonful to dessertspoonful two or three times daily.—*Correspondenzblatt f. Schweizer Aerzte.*

WAFERS FOR ADMINISTRATION OF BAD-TASTING FLUIDS.—Mix bad-tasting fluids, such as turpentine, balsam copaiba, ichthyol, etc., with sugar, coffee-powder, or flour, and then enclose and administer in wafers.—*Medical Record.*

INDEX TO VOLUME VI.

Page.

Abdominal Section, Abscesses Occurring After, 25
for the Treatment of Intra-peritoneal Injury..... 402
Surgery and How to Learn it..... 337
Abortion, Threatened, Ivoff on Viburnum Prunifolium in..... 141
Treatment of in Paris 449
Abortive Treatment of Furuncles..... ..375, 504
of Gonorrhœa.....521, 480
Abscess, Chronic, Treated by Irrigation..... 503
Cold, Electricity in the Treatment of... 119
the Treatment of..... 264
of Mastoid Cells, Operation for..... 61
Abscesses After Abdominal Section..... 25
Accouchement During Hypnotic Sleep..... 72
Acetphenetidin as an Antipyretic..... 480
the Latest Febrifuge, Some Clinical Effects of..... 406
Acne, a Successful Treatment of..... 143
the Treatment of..... 254
Aconitine in So-called Essential Neuralgia..... 238
in the Treatment of Nervous Diseases, 258
Acute Bronchitis of Children, Antipyrine in.... 523
Fevers, Glycerin in the Treatment of.... 240
General Peritonitis Without Pain..... 29
Rheumatism, a Remedy for..... 528
Adams, Alexander, Operations, Twenty Cases of, 93
Addiction and Dosage, Cocaine..... 128
Adjuvant, Ergotin as an to Digitalis..... 550
Adonis Vernalis..... 160
in Heart Disease..... 235
Advance the Standard..... 492
Agaricin as Used in Bellevue Hospital.....308, 456
for Night Sweats..... 376
Albuminuria, Action of Drugs in..... 48
Forms of Not Dangerous to Life, 187
Alcohol 393
Alimentary Canal, a Report of Three Cases of Resection of a Portion of the..... 413
Alimentation, Artificial..... 120
Alkaloid, A New Artificial..... 568
Allyn, Dr. H. S., Orange City, Fla., on Florida State Medical Society..... 273
Alopecia Adnata..... 318
Alteratives, Theory of the Action of..... 10
Alveloz in the Treatment of Cancer in the New York Skin and Cancer Hospital..... 550
Amenorrhœa..... 327
and Scanty Menstruation, a Method of Treating Some Cases of..... 256
American Medical Association, Meeting of..... 277
Ammonia, Picrate of, in the Treatment of Malarial Diseases.....187, 237
Treatment of Fever..... 378
Ammonium, Biborate of, for Uric-Acid Calculi. 383
Fluorides of, and Iron in Hypertrophy of the Spleen..... 283
Picrate in the Neurotic Sequelæ of Malaria..... 453
Picronitricum..... 264
Amyl Hydrate, a New Hypnotic..... 454
Nitrite 48
of, in Cholera..... 550
as a Uterine Sedative..... 240
Anæmia, a Case of Neuralgia Due to, Relieved by Food..... 243
Pernicious..... 379
Anæsthesia, a New Method of Inducing..... 311
Anal Fissure and Hemorrhoids, Treatment of by Gradual Dilatation.....380, 529

Page.

Analgesics..... 45
Antipyrine and Antifibrine as..... 381
Properties of Solanine..... 43
Remedy, on the Use of Piscidia Erythrina, Called Malong in Brazil, as an..... 70
Remedy, Piscidia Erythrina Called Mullungu, as an..... 477
Aneurism of the Apex of the Left Ventricle, Atheroma of the Left Coronary Artery Resulting..... 436
of the Leg, Sac of..... 440
Aniline Inhalations in Phthisis..... 240
Anodyne, an, for Dental Caries..... 72
in Use for Vesical Irritation..... 455
for Dental Caries..... 183
Anomaly, of the Cord, an..... 197
Antarthritic Collodion..... 424
Ante-Partum Hæmorrhage, a Case of at Term, Recovery..... 81
Anterior Chamber, a Case of Foreign Body in.. 103
Anti-Emetic, Nitrate of Potash as an..... 552
Cocaine as an..... 565
Antifebrine and Antipyrine..... 491
as Analgesics..... 381
in Typhoid Fever..... 190
Notes on..... 66
Antipyretic, Acetphenetidin as an..... 480
Action of Antipyrine and Thallin.. 5
Treatment of Typhoid, is it Beneficial..... 33
Antipyrine 461
and Antifebrine..... 491
as Analgesics..... 381
and Thallin Antipyretic Action of.. 5
in the Treatment of Typhoid..... 431
Hypodermically as a Substitute for Morphine..... 452
in Acute Bronchitis of Children..... 523
Bilious Headache..... 479
Lumbago..... 519
in Migraine, Sprimon on..... 168
Pneumonia..... 32
Sunstroke..... 260
Antiseptic Eugenol as an..... 528
Hypodermatic Injections in Bacterian Maladies..... 118
Hypodermic Injections, The Use of Vaseline in..... 144
Is Iodoform..... 141
Oil of Turpentine as a..... 548
Treatment in Summer Diarrhœa.. 164
of Pneumonia..... 22
Antiseptics, Concentration or Dilution of in the Local Treatment of Diphtheria.. 259
For Injections, New Form for.... 162
in the Treatment of Diarrhœa in Children. 335
Anti-Strumous Resolvent Lotion..... 264
Antiseptic Surgery..... 73
Aorta, A Heart Showing Atheroma at the Base of, and in the Mitral Valve..... 81
Aphasia and Hemiplegia and Chorea in a Negro —Two Remarkable Cases..... 241
Apocynum Cannabinum, Rusch on..... 144
Apomorphine, Hydrochlorate of..... 479
Apostoli's Method of Electrolysis in the Treatment of Fibroid Tumors..... 475

Page.
Armamentarium, Shall it Consist of Many Remedies or Few?... 195
Armstrong, Dr. O. S., Detroit, Mich., On Epidemic Membranous Croup... 217
On Guaiac in the Treatment of Scarlet Fever... 555
Arseniate of Strychnine and Pepsine... 312
Arsenic and Sodium Salicylate in Diabetes... 262
Articular Rheumatism and Acute Febrile Diseases, Salol in... 258
Artificial Alimentation... 120
A Singular Case... 322
What is it?... 174
Asthma, A Fumigation for... 520
and Dyspnœa, Hyoscyamine in... 503
Cardiac... 183
Etiology and Cure of... 76
Euphorbia Pilulifera in... 468
Pyridine in... 24
Therapeutics... 384
Treatment of... 96, 504
Astringents, Action of Vegetable... 47
Atheroma, A Heart Showing at the Base of the Aorta and in the Mitral Valve... 81
of the Left Coronary Artery Resulting in Aneurism of the Apex of the Left Ventricle... 436
Atrophic Nasal Catarrh, Thymol in the Treatment of... 209
Atropine and Quinine... 108
Hypodermatic Injection of in Hæmoptysis... 144
Injections in Hæmoptysis... 236
Aural Catarrh, Chronic, A New Method of Treating... 186
Axilla, Naphthol in Excessive Sweating of Extremities in the... 375
Axillary Adenitis in Tuberculosis of the Lung... 503

Babcock, Dr. Rob. H., Chicago, Ill., on a Case of Pericarditis and Endocarditis... 313
Bacillus of Typhoid, the Developement and Preservation of... 336
Theory and Tuberculosis... 47
Bacteria Cultures... 437
In Ice and Their Relations to Disease, 257
Bacterian Maladies, Antiseptic Hypodermatic Injections in... 118
Baker, Dr. H. B., Lansing, Mich., on Quarantine Does Not Deal with the Most Dangerous Diseases... 491
Baldness, What Can we Do for It?... 275, 391
Banana Root, Fluid Extract, in Bronchocele... 143
Bartlett, Dr. John, Chicago, Ill., on a Corveuse or Warming-Crib... 316
Baths, Dry Hot Air for Syphilitic Patients... 384
Food and Exercise, Insomnia Treated by... 111
Bath, Permanent, Therapeutic value of... 381
Bed-Wetting, Red Wine in... 527
Beef-Tea... 61
Nutritive Value of... 239
Belladonna and Ergot in Enuresis... 229
Mercury Bichloride in Membranous Croup... 48
Bell, Dr. Sam'l, Port Hope, Mich., on the Ophthalmoscope, Its Origin and Use as An Aid in Diagnosis... 125
Benzoate of Soda in Internal Catarrh... 262
Benzoin Resin in Ulcers... 168
In Treatment of Ulcers... 262
Bergeon's Method of Treating Phthisis by Gaseous Enemeta... 220

Page.
Bergeon's Treatment and Pneumatic Differentiation... 349
Berlin, Ophthalmic Matters in... 248
Biliary Lithiasis, Alimentary Regimen in... 312
Bilious Headache, Antipyrine in... 479
Biniodide of Mercury as A Emmenagogue... 183
Black Haw, Action of on Cows... 250
Blood, Defibrinated, Enemata of... 240
Purest, Where is It?... 159
Letting, Therapeutic Value of... 311
Should Tranfusion of, be Practiced as a Restorative Measure... 142
Bodenhamer, Dr. Wm., New York, on Treatment of Anal Fissures and Hemorrhoids by Gradual Dilatation... 529
Boice, Dr. John... 493
Boldo-Glucine, Hypnotic Properties of... 22
In Nervous Insomnia... 168

Book Notices.

A Companion to the United States Pharmacopœia. By Oscar Oldberg... 253
A Handbook of General and Operative Gynæcology. By Dr. A. Hegar and Dr. R. Kaltenbach... 447
A Manual of the Physical Diagnosis of Thoracic Diseases. By Dr. E. Darwin Hudson... 447
A Manual of Treatment by Massage and Methodical Muscle Exercise. By Dr. Jos. Shreiber... 281
A Practical Treatise on Impotence, Sterility and Allied Disorders of the Male Sexual Organs. By Sam'l W. Gross, A. M. M. D... 254
A Practical Treatise on Obstetrics. By Dr. A. Charpentier... 281
A Practical Treatise on Renal Diseases and Urinary Analysis. By Dr. W. H. Porter... 281
A Reference Hand-Book of the Medical Sciences. Edited by Dr. A. H. Buck... 135
A Reference Handbook of the Medical Sciences. By Various Writers... 447
A Text-Book of Surgery. By Dr. J. A. Wyeth... 135
Anatomy, Descriptive and Surgical. By Henry Gray... 471
An Index of Materia Medica. By Dr. Charles H. Hay... 561

Clinical Manual for the Study of Medical Cases. By Dr. Jas. Finlayson... 135
Cremation of the Dead. By Dr. Hugo Erichsen... 327
Cyclopedia of Obstetrics and Gynæcology. By Dr. A. Hegar... 374
Cyclopedia of Obstetrics and Gynæcology... 591

Diseases of the Female Mammay Glands. By Dr. Th. Billroth... 447
Diseases of the Female Urethra and Bladder. By Dr. F. Winckel... 374
Diseases of the Heart. By Dr. Dujardin-Beaumetz... 495
Druitt's Surgeon's Vade Mecum. By Stanley Boyd... 472

Elements of Botany. By Edson S. Bastin... 401

Functional Nervous Diseases. By Geo. T. Stevens... 518

Gynæcology, A System of. By American Authors... 326

BOOK NOTICES—CONTINUED. Page.

Lessons in Gynæcology. By Wm. Goodell, A. M. ... 447

Massage, Principles and Practice of Remedial Treatment by Imparted Motion. By Dr. G. H. Taylor. ... 448

Medical Electricity. By Roberts Bartholow, 253

On the Pathology and Treatment of Gonorrhœa and Spermatorrhœa. By J. L. Milton ... 327

Operative Surgery on the Cadaver. By Dr. J. J. Garmany ... 519

Pathological Anatomy and a Text-Book of Pathogenesis. By Ernst Ziegler ... 252

Practical Lessons in Nursing, Maternity, Infancy and Childhood. By Dr. J. M. Keating ... 374

Practical Microscopy. By Maurice N. Miller ... 560

Practical Urine Testing. By Dr. C. G. Jennings ... 472

Practitioners' Hand-Book of Treatment. By Dr. J. M. Fothergill ... 253

Principles and Practice of Operative Surgery. By Dr. Stephen Smith ... 134

Researches in Electro-Allotropic Physiology. By Dr. J. Kidder ... 496

Sexual Impotence in the Male and Female. By Wm. A. Hammond ... 401

Sketch of the Management of Pregnancy, Parturition and the Puerperal State, Normal and Abnormal. By Dr. P. F. Mundé ... 280

Students' Guide to Diseases of the Eye. By Edward Nettleship ... 400

Syphilis. By Jonathan Hutchinson ... 400

The Diagnosis and Treatment of Hæmorrhoids. By Dr. C. B. Kelsey ... 375

The Medical News Visiting List for 1888 ... 518

The Modern Treatment of Diseases of the Heart. By Prof. Dujardin-Beaumetz ... 375

The Physicians' Leisure Library, Diseases of the Heart, Vol. ii. By Dujardin-Beaumetz, M. D. ... 544

The Physician's Perfect Call-Book and Record. By Dr. G. Stockwell ... 472

The Physician's Visiting List ... 472

The Principles and Practice of Medicine. By J. Hilton Fagge ... 560

The Treatment of Hæmorrhoids, with General Rules as to the Examination of Rectal Diseases. By Dr. C. B. Kelsey, 280

Treatise on Human Physiology. By Dr. H. C. Chapman ... 518

Boracic Acid and Leucorrhœa ... 478

Borated Cotton and Cocaine ... 329

Boyd, Dr. Fred R, Cedar Springs, Mich., on a Case of Delayed Hydrophobia ... 434

Dr. F. R., Kalkaska, Mich., on a Plea for the Better Preparation of Students Before Entering Upon the Study of Medicine ... 169

Dr. F. R. Cedar Springs, Mich., Shall We Regulate the Practice of Medicine by Law? ... 537

Bowel Complaints, Salol in ... 371

Bright's Disease, Dietary of ... 89

Bronchiectasis and Cavity, Lung Showing Difference Between ... 81

Bronchial Affections, Lippia Mexicana in ... 558

Page.

Bronchitis, Acute, in Children ... 178

and Whooping Cough, Eucalyptus in ... 552, 568

Fetid, Remedy for ... 183

Pseudo-membranous, a Case of Chronic ... 49

Bronchocele, Fluid Extract of Banana Root in ... 143

Broncho-pneumonia, Phosphorus in the Treatment of ... 408

Treatment of in Children, 452

Bunce, Dr. Wm., Oberlin, O., on Contagiousness of Consumption ... 244

Burns and Scalds of the Second Degree, Cocaine Combined with Lanolin for ... 120

A New Remedy for ... 526

Superficial, Seltzer Water in Cases of ... 360

Treatment of ... 401, 504

Butler, Dr. Thos. M., Funny Louis, La., on Cascara Cordial in Prolapsus Ani ... 229

Cactus Grandiflorus ... 249

Caffeine, Citrate of in Cardiac Disorders ... 480

Calcareous Concretions in the External Ear ... 438

Calcium Phosphate in Tubercular Joint Diseases, 429

Calomel Hypodermically ... 288

Injections by a New Method in Syphilis, 282

Canadian Medical Association, Address on Obstetrics Before ... 508

Cancer, Alveloz in the Treatment of, in the New York Skin and Cancer Hospital, 550

Carbonate of Lime in ... 355

Chlorate of Potassium in the Treatment of ... 260

of the Lower Lip, Secondary Carcinoma from ... 321

Laryngeal, Treatment of ... 567

Treatment of by the Administration of Lime ... 479

of the Stomach, Condurango in ... 240

of Stomach, To Relieve Pain of ... 208

of the Stomach, to Relieve Pain of ... 39

of the Testicle with Secondary Pleurisy, 319

Cancerous Tumors, Carbonate of Lime as a Remedy for ... 310

Cannabis Indica in Diarrhœa ... 357

Capsules and Pills, Terpinol in ... 504

Carbolic Acid Spray for Erysipelas ... 43

Carbonic Acid Water, Sodium Arseniate and Lithium Carbonate Dissolved in, in the Treatment of Diabetes Mellitus ... 377

Carcinoma, Secondary, from Cancer of the Lower Lip ... 321

Cardiac Asthma ... 183

Disorders, Citrate of Caffeine in ... 480

Dropsy ... 208

Stimulant, Cocaine as a ... 144

Tonic, Coca as a ... 182

Carhart, Dr. J. W., Lampasas, Texas, on Irritation of the Spinal Cord ... 409

Carpenter, Dr. W. N., New York, on Clinical Significance of Endocardial Murmurs ... 82

Carrow, Dr. Flemming, Bay City, Mich., On Medicine Among the Chinese ... 1

Cascara Cordial, Citrate of Iron and Quinine with ... 240

in Prolapsis Ani ... 229

Sagrada and its Uses in the Treatment of Constipation ... 545

Tonic Action of ... 261

Cataract, Artificial Ripening of ... 566

Catarrhal Affections, Chronic, Oil of Turpentine in ... 184

Catarrh, Atrophic Nasal, Thymol in Treatment of ... 209

Page.

Catarrh, Cervical, Electricity in the Treatment of..... 233
Chronic Aural, a New Method of Treating..... 186
Internal, Benzoate of Soda in..... 262
Catharsis Produced by Hypodermic Medication..... 143
Catheterization of Women, Cocaine in..... 454
Caustic Paste, an Improved..... 455
Cavity of Lung and Bronchiectasis, Difference Between..... 81
Cell Antoganism..... 265
Cerebro-Spinal Meningitis, a Case of, Death.... 157
Cervical Catarrh, Electricity in the Treatment of.....233, 274
Glands, Excision of..... 321
Chalk Ointment as an Application for Erysipelas..... 115
Chancre of the Eyelid..... 198
Charcoal and Iodoform, Treatment of Diarrhœa by..... 282
Cheerfulness in the Sick-Room..... 514
Chemical Lung Test, Proposed..... 523
Chicago Medical Society.....
5, 52, 79, 103, 198, 222, 318, 346, 367, 437
Children, Acute Bronchitis in 187
Antipyrine in Acute Bronchitis of.... 523
a Rectal Injection for the Convulsions of..... 329
Lactic Acid Treatment in Diarrhœa in, 519
Malaria in..... 546
Nocturnal Cough in..... 94
Rectal Injection for the Convulsions of..... 480
Treatment of Pleurisy in..... 95
Broncho Pneumonia in, 452
Pneumonia in..... 254
Thread Worms in..... 168
Under Eight Years of Age, Dietary for..... 140
Chinese, Medicine Among the..... 1
Chloral Hydrate in Labor..... 160
as a Poison..... 39
Hydrocyanidide..... 480
Rectal Injection of, in Vomiting of Pregnancy..... 191
Chlorate of Potassium in the Treatment of Cancer..... 260
Chloroform Narcosis, a Well-Nigh Fatal Case of..... 536
Chlorosis, The Treatment of with Sulphur..... 263
Cholera Infantum..... 296
Treatment of in the Philadelphia Hospitals..... 353
in New York..... 445
Morbus, Creasote in..... 183
Nitrite of Amyl in..... 550
Chordee..... 183
Chorea, The Treatment of..... 478
Minor, Hypodermic Injections of Fowler's Solution in..... 189
in a Negro, and Aphasia and Hemiplegia—Two Remarkable Cases..... 241
Chronic Diarrhœa, Dr. Champeaux on the Treatment of by Sulpho-Carbonated Waters.. 191
Cinchona Alkaloids, Yerba Santa as a Vehicle of, 239
Cinder, How to Remove from Eye..... 567
Citrate of Caffeine in Cardiac Disorders..... 480
Iron and Quinine with Cascara Cordial, 240
City vs. County Doctors..... 247
Clark, Dr. J. E., Detroit, Mich.,
On Rupture of Ductus Communis Choledochus..... 31

Page

Clark, On The Use of Sulphuretted Hydrogen in Phthisis..... 171
Climate and Water in the Treatment of Disease, 211
Climatic Treatment of Disease..... 145
Phthisis Pulmonalis..... 499
Clinical Lecture..... 73
Coca as a Cardiac Tonic..... 182
Cigarettes..... 383
Cocaine and Borated Cotton 328
as a Cardiac Stimulant..... 144
Combined with Lanolin, for Burns and Scalds of the Second Degree..... 120
Disinfectant Properties of..... 520
Dosage and Cocaine Addiction... 128, 153
Hypodermic Injections, Tetanus Cured by..... 383
in Catheterisation of Women..... 454
the Incoercible Vomiting of Pregnancy.....264, 565
Mercurial Stomatitis..... 120
Not a Dangerous Toxic Agent..... 71
Phenate of..... 288
Physiological Action of..... 238
Solutions of in Liquid Vaseline..... 312
in Stricture..... 553
The Use of in Coryza..... 144
Coca Preparations, Efficacy of..... 22
Tea and Coffee, Influence of on Digestion, 287
Cod-liver Oil in Nervous Affections of Children, 64
Coffee, Tea, and Cocoa, Influence of on Digestion..... 287
Colchicum, Note on the Use of in Gout..... 550
Cold Abscess, Electricity in the Treatment of... 119
Colds, A Cure for..... 182
Cold Air, Inhalations of in Typhoid Fever 94
Colds, Treatment of..... 136
Cold Water Treatment of Typhoid..... 429
Colic, Nephritic, Treatment of 183
Collodion, Antarthritica..... 424
Collapse, Nitro-glycerin in..... 23
Collinsonia Canadensis, Therapeutic Application of..... 551
Collodion, a New..... 182
Compound Salicylated Plaster..... 520
Condurango in Cancer of the Stomach..... 240
Congestive Headaches, Treatment of..... 449
Conine by Synthesis..... 72
Conium, Therapeutic Application of..... 255
Constipation, Cascara Sagrada and its Uses in the Treatment of..... 545
in Kansas..... 348
Consumption, a Remedy for..... 519
Contagiousness of..... 244
in Dakota..... 156
is Tubercular Inherited?..... 35
Mutisia Viciæfolia in..... 23
Recent Advances in the Treatment of 469
Contagiousness of Phthisis..... 173
Scarlatina..... 36
Contract System..... 443, 467
Convulsions of Children, Enema for..... 312
a Rectal Injection for, 329
Copaiba, Balsam, a Convenient Formula for.... 302
Corcoran, Dr. J. P., Detroit, Mich.,
On Scarlet Fever vs. Rœtheln..... 101
Chordee, Treatment of..... 399
Corn Silk, Fluid Extract of in the Treatment of Cystitis..... 71
Stigmata Maidis..... 85
Corrosive Sublimate in Typhoid Fever..... 119
Coryza, the Use of Cocaine in..... 144
Cotton Root, Decoction of as a Hæmostatic.... 190

Page.

Cou, Dr. F. E., Clayton, Minn., On Poisons and Their Antidotes.... 442
Coughs, Nocturnal, in Children..... 94
Counter-Irritation Over the Hepatic Region, the Treatment of Epistaxis by..... 287
Country vs. City Doctors..... 247
Corveuse or Warming Crib..... 316
Crane, Dr. F. J. Chicago, Ill., On Bergeon's Method of Treating Phthisis by Gaseous Enemata..... 220
Creasote in Phthisis.....432, 478, 527, 548
in Cholera Morbus..... 183
Cremation Among the Tlinkets..... 123
Crotalus or Rattle snake Poison..... 44
Croup, Epidemic Membranous..... 217
Croupous Pneumonia, Treatment of..... 205
Croup, Membranous, Mercury Bichloride and Belladonna in..... 48
Crull, Dr. A., Dittmer's Store, Mo., on Syrup Trifolium Compound..... 394
on Tick Bites..... 218
on Thorny Honey Locust..... 490
Cupp, Dr. M. F., Metamora, Ind., on Shall our Armamentarium Consist of Many Remedies or Few?..... 195
Cutaneous Disorders During Pregnancy, Pomade for..... 254
Cystitis and Prostate Enlargement of..... 348
Fluid Extract of Corn Silk in 71
New Remedy for..... 44
Pichi for..... 216

Dakota, Consumption in..... 156
Dandruff and Falling Hair, a Remedy for..... 208
Death, Injection of Ether in Cases of Supposed Sudden..... 235
Decapitated Animals, Effects of Transfusion Upon the Heads of..... 398
Defibrinated Blood, Enemata of..... 240
Dental Caries, Anodyne for 72, 183
Dermoid Cyst in a Young Child, a Case of..... 345
De Wolf, Dr. J. H., Baltimore, Md., on Pichi in Dysuria 249
on the Regulation of Medicine..... 557
Diabetes, a Convenient Formula for the Treatment of, by Lithium in Pill Form.. 552
a New Treatment of..... 263
Jambul Seeds in 238
Mellitus, Lithium Carbonate and Sodium Arseniate Dissolved in Carbonic Acid Water in the Treatment of..... 377
Thymol in..... 564
Martineau's New Remedy for.....254, 359
Sodium Salicylate and Arsenic in..... 262
Treatment of..... 238
Diarrhœa, Cannabis Indica in..... 357
of Children..... 301
Antiseptics in the Treatment of..... 335
Lactic Acid in 519
Chronic, Treated by Sulpho-Carbonated Waters..... 191
Tropical, Pepsin in the Treatment of..... 239
Green, of Infants.....302, 312
Infant, Remedy for..... 183
Summer, Antiseptic Treatment in... 164
Treatment of, by Iodoform and Charcoal..... 282
Dickey, Dr. W. A., Tiffin, O., on Medical Students 441
Digestion, Influence of Tea Coffee and Coca on..... 287

Page.

Digital Exploration of the Kidney, with Report of Three Cases 203
Digitalis, Ergotin as an Adjuvant to..... 550
Diphtheria, a Useful Application in..... 496
Benzoate of Sodium as a Specific for, 70
Concentration or Dilution of Antiseptics in the Local Treatment of, 259
Fluid Extract Eucalyptus Globulus Locally in..... 431
Galvanic Cautery in..... 72
Mercury Biniodide in..... 16
Nasal Treatment of..... 384
Oil of Turpentine in..... 528
One Way to Prevent the Spread of, 396
Remedy for..... 208
Some Irregular Cases of..... 97
Treatment of..... 39
Disease, Bacteria in Ice and Their Relation to.. 257
Climate and Water in Treatment of... 219
Climatic Treatment of..... 145
Disinfectant, a New..... 144
Mixture for Apartments..... 39
Properties of Cocaine..... 520
Distilled Water Not Good for Eye Lotions..... 401
Dietary of Bright's Disease..... 89
Children Inheriting a Tendency to Phthisis 474
Dietetics of Pulmonary Phthisis..... 167
Dietetic Treatment of Eczema..... 239
Diet, Influence of on Headache..... 261
Diuretic Wine..... 281
Don'ts for the Sickroom..... 46
Dorsch, Dr. Edward, Death of..... 36
Dosage and Addiction Cocaine..... 128
Dropsy, Cardiac.. 208
Drug Experimentation on the Lower Animals.. 489
Drugs, a Few Notes on the Therapeutic Action of Certain..... 539
Drumine, a New Local Anæsthetic..... 20
Experiences with as a Local Anæsthetic..... 135
Ductus Communis Choledochus, Rupture of.... 31
Dujardin-Beaumetz on the Therapeutic Uses of White Nettle..... 183 408
Dysentery Acute, Treatment of..... 359
Epidemic..... 284
Paracoto in..... 317
Dyspepsia, Flatulent..... 328, 234
Iron as a Remedy for..... 311
Nervous, Study of..... 526
Dyspnœa and Asthma Hyoscyamine in..... 503
Dysuria and Strangury of Old Age, Relief of... 360
Pichi in..... 249

Ear, How to Syringe..... 69
Earthquakes, Peculiar Symptoms Caused by.... 440
Eccles, Dr. F. R., London, Ont., An Address by on Obstetrics Before the Canadian Medical Association..... 508
Eczema, An Ointment for..... 254
Contagious..... 507
Dietetic Treatment of..... 239
New Treatment for 479
Papulosa Contagiosa or Prairie Itch... 428
Education, Preliminary..... 177
Egyptian Tamarind for Hemorrhoids..... 549
Elbow-joint, Resection of the..... 73
Electricity in the Treatment of Cervical Catarrh, 231, 274
Cold Abscess.... 119
Epilepsy..... 210
as a Galactagogue..... 263
Induction of Labor by..... 162

Page.

Electricity, New Method of Employing in Neuralgia... 72
in Treatment of Insomnia... 312
Electrolysis, Apostoli's Method of in the Treatment of Fibroid Tumors... 475
for Fibroids of the Uterus... 56
Pseudomembranous Laryngitis Treated by... 9
Ely, Dr. J. D., Medina, Mich., on Phytolacca Decandra, 102
on Sunstroke, 342
Emmenagogue Action of Oxalic Acid... 96
Biniodide of Mercury as an...96, 183
Intra-uterine Stem Pessary as an, 480
Notes on the Use of Guaiacum as an... 117
the Use of Indigo as an... 358
Enucleation of the Injured Eye, Three Cases of Sympathetic Ophthalmia Arrested by... 321
Endocardial Murmurs, Clinical Significance of.. 82
Endocarditis and Pericarditis, a Case of... 313
Enemata of Defibrinated Blood... 240
Gaseous, Treatment of Phthisis by... 137
Nutrient... 310
Engstadt, Dr. J. E., Grand Forks, Dakota, on Consumption in Dakota... 156
Enlarged Prostate, Management of... 46
Enuresis, Ergot and Belladonna in... 229
Nocturnal, Rhus Aromatica for... 216
Oil of Mullein as a Remedy for... 311
Rhus Aromatica in... 456
Unna on Sweet Sumach in... 263
Epidemic Dysentery... 284
Membranous Croup... 217
Epilepsy... 208
Electricity in the Treatment of... 210
a Remedy for... 144
Epistaxis, Treatment of, by Counter-Irritation Over the Hepatic Region... 287, 334
Epithelioma, Chlorate of Potassium in... 237
Ergot and Belladonna in Enuresis... 229
Normal Liquid... 467
in a Case of Secondary Uterine Hæmorrhage... 317
Therapeutic Value of... 17
Ergotin as an Adjuvant to Digitalis... 550
Therapeutic Value of... 142
Hypodermic Use of... 453
Erichsen, Dr. Hugo, Detroit, Mich., on Physician's Fees... 14
Erigeron, Notes on the Uses of the Oil of... 234
Erysipelas Treated by Carbolic Acid Spray... 43
Chalk Ointment as an Application for... 115
in Infants... 549
Ergot in... 236
Nussbaum's Views on Treatment of, 309
a New Treatment of... 382
Treatment of... 216
Eruptions, Syphilitic... 289
Ether, Dangers of Administration of, in Nephritis... 95
Injection of, in Cases of Supposed Sudden Death... 235
Spirit of, as a Corrigent of Opium... 376
Ethyl, Bromide, in Ophthalmic Surgery... 92
Etiology and Cure of Asthma... 76
Therapeutics of Migraine... 257
Eucalyptus Globulus, Fluid Extract, Locally in Diphtheria... 431
in Whooping-Cough and in Bronchitis...552, 568
Eucalyptol, Injections of, in Pulmonary Affections... 310

Page.

Eucalyptol, in Phthisis... 192
the Subcutaneous Administration of... 240
Eulyptol and its Internal Administration... 143
Eucalyptus Oils, Materia Medica of the... 285
a Specific for Typhoid... 231
Eugenol as an Antiseptic... 528
Eupatorium Purpureum... 294
Euphorbia, External Application of the Juice of, 71
Heterodoxa... 286
Pilulifera in Asthma... 468
Exercise, Baths and Food, Insomnia Treated by... 111
Explosive Compound, an... 86
External Ear, Calcareous Concretions in the... 438
Eye Ball, a Remedy for Burns on... 496
Diseases Occurring in Children, Hints on Some Points in... 425
Lotions, Distilled Water not Good for... 401
Three Cases of Sympathetic Ophthalmia Arrested by Early Enucleation of the Injured... 321

Fallopian Tubes, Diseased... 399
Febrifuge, Acetphenetidine the Latest, Some Clinical Observations on the Effects of ... 406
Febrile Conditions, Oxygen Baths in... 382
Diseases, Acute, and Articular Rheumatism, Salol in... 258
Feeding After Surgical Operations... 167
Female Genitals, Pruritis of... 448
Furuncles, Abortive Treatment of...375, 405, 504
Fetid Bronchitis, Remedy for... 183
Fever, the Ammonia Treatment of... 378
Food in... 256
Mixture... 183
Fevers, a New Treatment of... 166
Salt Baths in... 48
Fibroid Tumors, Apostoli's Method of Electrolysis in the Treatment of... 475
Fibroids of the Uterus, Electrolysis in... 56
Fistula, in Ano, the Treatment of, Without Operation... 396
Flatulent Dyspepsia, a Mixture for... 424
Treatment of... 328
Florida, Sanitation in... 269
State Medical Society... 273
Fluorides of Ammonium and Iron in Hypertrophy of the Spleen... 283
Fluid Extracts vs. Tinctures... 88
Fœtid Leucorrhœa, An Injection for... 120
Food, Baths and Exercise, Insomnia Treated by... 111
in Fever... 256
Foreign Body, a Case of in the Anterior Chamber... 103
Fowler's Solution, Hypodermic Injection of in Chorea Minor... 189
France, Dr. John W., Dunkirk, Ind., on Lippia Mexicana in Bronchial Affections... 558
Freckle Cure... 302
Fumigation, a, for Asthma... 520
Functional Insomnia, Notes on the Cause and Treatment of... 330
Furber, Dr. J. L., Topeka, Kansas, on Normal Liquid Ergot in a Case of Secondary Uterine Hæmorrhage... 317
Future, Physician of the... 41

Galactagogue, Electricity as a... 263
Pilocarpine as a... 455
Galazina... 72
the New Non-Alcholic Stimulant... 192
Galvano-Cautery in Diphtheria... 72

Page.
Gardner, Dr. W. W., Springfield, Mass., on Country vs. City Doctors.... 247
Gaseous Enemata, Bergeon's Method of Treating Phthisis by....137, 220
Gas, Rectal Injections of.... 68
Gastralgia, Treatment of.... 307
Gastric Disturbance, Severe During Pregnancy, 71
Intolerance, Nutrients in.... 259
Gaultheria in Rheumatism.... 216
Gavage of the Newborn.... 308
Genito-Urinary Pharmacopœia, Therapeutic Value of the More Recent Additions to the, 474
Gibbon, Dr. H. B., Tiffin, O., on a Plea for Legal Recognition.... 100
Glandular Swellings.... 261
Glaucoma, a Clinical Study of.... 103
Gleditschine Fiasco.... 489
Report of an Authentic Sample of 2-per-cent. Solution of.... 485
Stenocarpine.... 467
(Stenocarpine) Sensation Exploded, 465
Spurious and Genuine.... 562
Gloss, Dr. T. F. Arlington, Ind. on Ergot and Belladonna in Enuresis.... 229
Glycerin in the Treatment of Acute Fever.... 240
Glycerole for Vulvar Pruritus.... 401
Goitre, Phytolacca Decandra in.... 158
Gonorrhœa, Abortive Treatment of....480, 522
Bicarbonate of Sodium in the Treatment of.... 142
Treatment of.... 279
Gonorrhœal Epididymitis, Nitrate of Silver in the Treatment of.... 424
Gout.... 183
Note on the Use of Colchicum in.... 550
Gradual Dilatation, Treatment of Anal Fissures and Hemorrhoids by.... 380
Green, Dr. J. E., Macon, Ga., On Stigmatia Maidis, Corn Silk.... 85
Gregory, Dr. E. W., St. Louis, Mo., On Cell Antagonism.... 265
Gregory, Dr. H., Laurel, Ind., On a Few Notes on the Therapeutic Action of Certain Drugs.... 539
Griffin, Dr. Theodore, Kansas City, Mo., On Drug Experimentation on the Lower Animals.... 489
Grindelia Robusta in Respiratory Neuroses.... 479
in Whooping Cough.... 288
Therapeutic Properties of... 476
Squarrosa.... 160
Groner, Dr. F. J., Big Rapids, Mich., On Physicians' Fees.... 11
Guaiacum as an Emmenagogue, Notes on the Use of.... 117
in the Treatment of Scarlet Fever.... 555
Guaical.... 568
Guarana in Sick Headache.... 432
Gunn, Moses, Death of.... 493

Hair, for Falling of and Dandruff.... 208
Follicles, Inflammation of the, Within the Nares.... 191
Hæmoptysis, Hypodermatic Injections of Atropine in.... 144
Treatment of.... 383
Hæmorrhage, A Case of Ante-partum at Term; Recovery.... 81
Hydrastis Canadensis in.... 480
Hæmostatic, Decoction of Cotton-root as a.... 190
Mixture.... 519
Haigh, Dr. Joseph, Grenada, Kansas, On Electricity in the Treatment of Cervical Catarrh.... 274

Page.
Haines, Dr. Geo. M., On Ustilago Maidis.... 512
Hall, Dr. Jesse B. Bellaire, Mich., On Antipyrine in Pneumonia.,.... 32
Hamamelis and Terebene, Collective Investigation of.... 309
Hare-lip, A Case of Double.... 127
Hay Fever, An Analysis of 42 Cases of.... 454
Treatment of.... 303
Head, Therapeutics of Neuralgia of.... 552
Headache and Dental Neuralgia of Pregnancy, Remedy for.... 183
Influence of Diet on.... 261
Nitro-glycerin in.... 566
Value of Indian Hemp in the Treatment of a Certain Type of 163
Heart and Blood-vessels, Action of Medicines on the.... 293
Disease, Adonis Vernalis in.... 235
Green Hellebore in Diseases of the.... 456
Heating and Ventilation of Public Buildings.... 553
Hellebore, Green, in Diseases of the Heart.... 456
Hemiplegia and Aphasia, and Chorea in a Negro —two Remarkable Cases.... 241
Hemorrhage, Uterine, Hydrastis Canadensis in, 114
Hemorrhagic Conditions, Therapeutic Value of some Medicines in the Treatment of.... 474
Hepatic Congestion, Treatment of.... 448
Region, Treatment of Epistaxis by Counter-Irritation Over.... 287, 334
Hemorrhoids and Anal Fissures, Treatment of by Gradual Dilatation.... 380
Egyptian Tamarind for.... 549
and Anal Fissures Treated by Gradual Dilatation.... 529
Herniotomy, A New Operation to Supplant.... 526
Herpes Omobrachialis.... 198
Herpes, Treatment of.... 520
Herrmann, Dr. G. J., St. Louis, Mo., on Adonis Vernalis.... 160
Hints on Peptonizing Milk.... 382
Hitchcock, Dr. H. O., Kalamazoo, Mich., On Two Series of Cases of Strangulated Hernia, Lessons to be Learned from Them.... 481
Hoffman, Dr. J. E., Poughkeepsie, N. Y., On Alcohol.... 393
On a Theory of the Action of Alteratives.. 10
On A Chief Cause of Non-Success.... 295
On Oxaluria.... 272
On What is Medical Psychology.... 343
Holly, Dr. D. C. Grand Rapids, Mich., On Unwritten Medicine and Medical Societies.... 121
Hootton, Dr. H. E., Kimpner, Texas, On Euphorbia Plulifera in Asthma.... 468
Hot Air Baths Effects of on Assimilation.... 311
Hot Water, or Ice in Uterine Hemorrhage?.... 261
Huntington, Dr. W. C., Howell, Mich., On Newspaper Advertising.... 490
Hydrastis Canadensis in Hæmorrhage.... 480
Pill Form.... 456
Uterine Hæmorrhage... 114
Hydrochlorate of Apomorphine.... 479
Hydrobromic Acid, The Use of As a Remedial Agent.... 214
Hydrobromate of Quinine.... 264
Hydrogen, Peroxide of in Whooping-Cough.... 181
Hydrofluoric Acid in Tuberculosis.... 71
Hydrophobia.... 323
A Case of Delayed.... 434
What is It?.... 445
Hygiene, Laboratory of in the University.... 35
Hygienic Treatment of Struma.... 563
Hypertrophy of the Spleen, Fluorides of Ammonia and Iron in.... 283

Page.

Hypnone, Paraldehyde, Urethan and Hyoscine Compared..... 68
Hypnotic, A New..... 96, 384
Amyl Hydrate, A New..... 454
Properties of Boldo-Glucine..... 22
Sleep, Accouchement During..... 72
Hyoscine, Hypnone, Paraldehyde and Urethan Compared..... 68
in Kidney Diseases..... 138
Hyoscyamine in Dyspnœa and Asthma..... 503
Hypodermatic Use of Ergotin..... 453
Injection of Atropine in Hæmoptysis..... 144
Hypodermic Injection of Fowler's Solution in Chorea Minor..... 189
Medication, Catharsis Produced by, 143

Ice, Bacteria in, and Their Relation to Disease, 257
or Hot Water in Uterine Hemorrhage?.... 261
Ichthyol..... 192, 508
Uses of in Therapeutics..... 93
Incontinence, Chronic, in Children..... 451
Indian Hemp, Value of in The Treatment of a Certain Type of Headache..... 163
Index Medicus and The Medical Profession.... 251
Indigo, The Use of, as an Emmenagogue..... 358
Infancy, on the Alleged Dangers of Starch-Containing Foods in..... 334
Infant Diarrhœa, a Remedy for..... 183
Infantile Constipation..... 520
Convulsions, Injection for..... 520
Diarrhœa, a Mixture for..... 424
Infants, a Convenient Truss for..... 373
How to Have Good Milk for..... 336
Erysipelas in..... 549
Intussusception in..... 190
Inflammation, Acute, of the Middle Ear..... 399
of the Hair Follicles within the Nares..... 191
Injections of Eucalyptol in Certain Pulmonary Affections..... 310
Injection, New Form for Antiseptics for..... 162
Ink, Composition for Removing..... 432
Insane, Jamaica Dogwood in Sleeplessness of the..... 430
Insanity and Self-Abuse..... 17
Use of Sedatives in..... 112
Insects, Treatment of the Bites of..... 408
Insomnia, Electricity in Treatment of..... 312
Functional, Notes on the Cause and Treatment of..... 330
Nervous, Boldo-Glucine in..... 168
Treatment of, by Food, Baths and Exercise..... 111
Treatment of Functional..... 306
Intermittent Fever, Decoction of Lemon in..... 476
International Medical Congress.....372, 415, 422
Intestinal Antiseptics, Utility of..... 451
Disease, Laparotomy for Obscure... 242
Intra-Ocular Tumor, a Case of..... 104
Intra-Uterine Stem Pessary as an Emmenagogue..... 480
Intubation of Larynx as a Substitute for Tracheotomy..... 15
Intussusception in Infants..... 199
Iodide of Sodium, the Hypodermic Use of..... 24
Iodine, to Remove Stains of, from the Skin.... 72
Iodoform, a Substitute for..... 376
and Charcoal, Treatment of Diarrhœa by..... 282
in Phthisis..... 375
is it Antiseptic?..... 142
Menthol as a Deodorizer..... 568
Vaseline in Small-Pox..... 192

Page.

Iodol, Useful Preparations of..... 360
Iron, Citrate of, and Quinine with Cascara Cordial..... 240
Subcutaneous Injections of.. 240
and Fluorides of Ammonium in Hypertrophy of the Spleen..... 283
Lemonade..... 376
Irrigation, Treatment of Chronic Abscess by... 503
Itching Piles, Remedy for..... 208

Jamaica Dogwood in Sleeplessness of the Insane..... 430
Jambul Seeds in Diabetes..... 238
Jequirity in Chronic Granular Metritis..... 23
Jessop, Dr. C. M., on Latent Rheumatism..... 461
Jinkins, Dr. W. E., Redding, Mass., on Where is the Purest Blood?..... 159
Johnson, Dr. H. A., Chicago, Ill., on a Case of Pseudomembranous Bronchitis .. 47
Dr. H. H., Fostoria, Kas., on a Singular Case—What is it?..... 174

Kansas, Constipation in..... 348
Kauffman, Dr. E. J., New York, N. Y., on a Case of Neuralgia Due to Anæmia, Relieved by Food..... 243
Kefir, Employment of in Diseases of Children.. 451
Ketchum, Dr. M. B., Palo Pinto, Texas, on Syrup Trifolium Comp. in Syphilis, 442
On That Unusual Form of Typhoid Fever..... 530
Kidney, Digital Exploration of the, with Report of Three Cases..... 203
Diseases, Hyoscine in..... 138
Kiss, What's in a?..... 513
Knee-joint, Case of Synovitis of the..... 366
Kolischer's Treatment of White Swelling..... 407
for Tuberculosis..... 503
Kreider, Dr. J. B. Bucyrus, Ohio, on Excision of the Tibia..... 86
Kuh, Dr. E. J., Chicago, Ill., on Etiology and Cure of Asthma..... 76

Laboratory of Hygiene in the University..... 35
Labor, Chloral Hydrate in..... 160
Induction of by Electricity..... 162
Methods for Inducing..... 47
Lactic Acid Treatment of Diarrhœa in Children, 519
Lafayette Mixture..... 370
La Fertá, Dr. Daniel, Detroit, Mich., on a Case of Double Hare-lip..... 127
on a Successful Case of Rhinoplasty..... 193
Lang, Dr. T. Vienna, Austria, on Contagious Eczema..... 507
Lanolin, Cocaine Combined with, for Burns and Scalds of the Second Degree..... 120
Laparotomy for Obscure Intestinal Disease..... 242
Large Doses..... 525
Lateral Curvature of the Spine..... 87
Lavage of the Stomach in Peritonitis..... 264
Legal Recognition, a Plea for..... 100
Leg, Sac of an Aneurism of the..... 440
Lemon, Decoction of in Intermittent Fever..... 476
Leucorrhœa and Boracic Acid..... 478
Lewis, Dr. D. A., Wheeling, W. Va., on Syrup Trifolium Comp. in Syphilis..... 16
Lime, Carbonate of in Cancer.....310, 355, 479
Lippia Mexicana in Bronchial Affections..... 558
Lithiasis Biliary, Alimentation in..... 312
Lithia Water, a Contribution to the Study of the Therapy of..... 433
Lithium, a Convenient Formula for the Treatment of Diabetes by, in Pill Form... 552

Page.
Lithium, Carbonate and Sodium Arseniate Dissolved in Carbonic Acid Water in the Treatment of Diabetes Mellitus..... 377
Lithotomy Position, a Mechanical Position for Maintaining..... 368
Lobeline..... 264
Local Anæsthetic, Experiences with Drumine as a..... 135
Locomotor Ataxy, the Early Signs of..... 524
Lower Animals, Drug Experimentation on..... 489
Low Fees, Another Cause of..... 37
Lumbago, Antipyrine in..... 519
a Remedy for..... 376
Lung, Axillary Adenitis in Tuberculosis of the.. 503
Surgery..... 191
Terebene in Diseases of..... 477
To Effect the Excretion of Sulphur by the, 552
Lyster, Dr. Henry F., Detroit, Mich., on Heating and Ventilation of Public Buildings... 553

Malaria, Ammonium Picrate in Neurotic Sequelæ of..... 453
in Children..... 546
The Bacillus of..... 21
Malarial Disease, Picrate of Ammonia in..... 237
Diseases, the Treatment of by Picrate of Ammonia..... 187
Mammary Gland, Removal of Scirrhous Tumor of..... 60
Martineau's New Remedy for Diabetes..... 359
Remedy for Diabetes..... 254
Mastoid Cells, Operation for Abscess of..... 61
Materia Medica of the Eucalyptus Oils..... 285
Mattison, Dr. J. B., Brooklyn, N. Y., on Cocaine Dosage and Cocaine Addiction.....128, 151
Gleditschine—Stenocarpine..... 467
Mays, Dr. J. B , Peru, Fla., on Cactus Grandiflorus..... 249
McColl, Dr. H., Lapeer, Mich., on How Typhoid Fever is Spread and How It May Be Prevented..... 488
McDonell, Dr. J. H., Chicago, Ill., on Action of Medicines on Heart and Blood-vessels..... 293
McGraw, Dr. Theo. A., Detroit, Mich., on Abscesses Occurring After Abdominal Section..... 25
A Case of Dermoid Cyst in a Young Child..... 345
A Case of Death From Rupture of the Middle Meningeal Artery..... 364
A Retro-Peritoneal Tumor..... 505
McLachlan, Dr. D. P., York, Mich., on Atropine and Quinine..... 108
Mecurial Stomatitis, Cocaine in..... 120
Medical Profession, Index Medicus and..... 251
Psychology, What Is It?..... 343
Students.....407, 441
Regulation by Legislation..... 556, 557
Medicine Among the Chinese..... 1
A Plea for the Better Preparation of Students Before Entering Upon the Study of..... 169
On the Action of..... 394
Recent Advances in Preventive..... 245
Regulation of Practice of, by Law... 487
Shall We Regulate the Practice of, by Law?..... 537
Unwritten and Medical Societies..... 121
Membranous Croup, Mercury Bichloride and Belladonna in..... 48
Menorrhagia..... 183
Menthol, Lanoline Ointment..... 456
to Deodorize Iodoform..... 568

Page.
Menthol, Uses of..... 182
Menstruation, Painful..... 181
Scanty and Amenorrhœa, A Method of Treating Some Cases of..... 256
Mercurial Necrosis, A Case of, with Specimen.. 368
Mercury, a Non-irritating Preparation of..... 234
Bichloride and Belladonna in Membranous Croup..... 48
of, in Obstetrical Practice, 527
Biniodide of, as an Emmenagogue, 96, 183
in Diphtheria and Scarlatina, 16
Methylal..... 260, 551
Methyl Chloride in Neuralgia..... 312, 408
Metritis, Chronic Granular, Jequirity in..... 23
Michigan Medical Act..... 176
Middle Ear, Acute Inflammation of the..... 399
Meningeal Artery, A Case of Death from Rupture of the..... 364
Migraine, Etiology and Therapeutics of..... 257
Sprinton on Antipyrine in..... 168
Milk Diet, the Abuses of in Therapeutics..... 356
How to Have Good for Infants..... 336
Treatment..... 42
Miller, Dr. J. N., Mound City, Mo.,
On Peculiar Eruption Accompanying Pneumonia..... 108
Miller, Dr. F. C., Tacuna, W. T.,
On a Polypus Complicating Pregnancy..... 395
Mind Cure..... 444
Mitral Valve, A Heart Showing Atheroma at the Base of the Aorta and in the..... 81
Momordica Bucha..... 311
Morphine, Antipyrine Hypodermically as a Substitute for..... 452
Habit, New Treatment of..... 264
The Use of Sparteine and Nitro-glycerine in. 358
Morphinomania, Treatment of..... 263
Morse, Dr. Willard H , Westfield N. J.,
On a Contribution to the Study of the Therapy of Lithia Water..... 433
On the Exhibition of Phosphates..... 457
Mountain Climbing, Benefits of..... 139
Mudd, Dr. H. H., St. Louis, Mo.,
On Peritonitis 291
Mulheron, Dr. J. J., Detroit, Mich.,
On Two Remarkable Cases, One of Hemiplegia and Aphasia, and one of Chorea in a Negro..... 241
Note on an Unusual Form of Typhoid Fever, 459
Mullein, Oil of, as a Remedy for Enuresis..... 311
Mullunga, Piscidia Erythrina, as an Analgesic Remedy.....70, 477
Muscular Rheumatism Due to the Use of Tobacco..... 72
Mutisia Viciæ Folia in Consumption..... 23

Naphthaline in Urinary Diseases..... 24
Naphthol in Excessive Sweating of Extremities in the Axilla..... 375
Narcosis, Chloroform, a Well-nigh Fatal Case of, 536
Nasal Catarrh, Resorcin in the Treatment of... 455
Nasal Cavity, a Simple way to Apply Fluids to.. 381
Duct, Some Modifications in the Treatment of Stricture of the..... 104
and Ocular Diseases, Connection Between..... 104
Polypi..... 528
and Throat Diseases, Submucous Injections in Chronic 502
Nelson, Dr. C. E., New York, on Success—Mistakes..... 248
Nephritic Colic, Treatment of..... 183

Page.
Nephritis, Dangers of Administration of Ether in..... 95
and Uræmia, Nitro-Glycerin in..... 455
Nervous Affections of Children, Treated by Cod-Liver Oil..... 64
Diseases, Aconitine in the Treatment of..... 258
Neuralgia, a Case of, Due to Anæmia, Relieved by Food..... 243
a Novel and Simple Remedy for... 262
Chloride of Methyl in..... 408
Cold in Localized..... 308
Dental, and Headache of Pregnancy Remedy for..... 183
of the Head, Therapeutics of..... 552
Essential, Aconitine in..... 238
Methyl Chloride in..... 312
New Method of Employing Electricity in..... 72
Neuralgic Sore Throat, Treatment of..... 333
Neuroses, Respiratory, Grindelia Robusta in... 479
Neurotic Sequelæ of Malaria, Ammonium Picrate in..... 453
Newspaper Advertising.....490, 512
New York, Cholera in..... 445
Hospitals, Ointment for the Formulary of the..... 182
Skin and Cancer Hospital, the use of Alveloz in..... 550
Night Sweats, Agaricin for..... 376
of Phthisis Treated by Secale Cornutum..... 480
Nitrite of Amyl..... 48
Nitro-Glycerin in Collapse..... 23
Indications for..... 431
in Headaches..... 566
in Nephritis and Uræmia..... 455
and Sparteine in the Morphine Habit..... 358
Njimo Wood..... 288
Nocturnal Cough in Children..... 94
Enuresis, Rhus Aromatica for..... 216
Non-Irritant Antiseptic Liquid..... 519
Success, a Chief Cause of..... 295
Norfleet, Dr. Julian A., Ivar, Va., on Prolapsus Uteri in the Third Degree..... 370
Nussbaum's Views on the Local Treatment of Erysipelas..... 309
Nutrient Enemata..... 310
Nutrients in Gastric Intolerance..... 259

Obstetrics, Address on, Before the Canadian Medical Association..... 508
Obstetrical Practice, Bichloride of Mercury in.. 527
Ocular and Nasal Diseases, Connection Between 104
Oculo-Motor Paralysis, Periodically Recurring, 318
Œsophagus, Stricture of the..... 86
O'Hara, Dr. Robt., Charlemont, Va., On A Case of Cerebro-Spinal Meningitis..... 157
Ointments for The Formulary of The New York Hospitals..... 182
Old-Age, Relief of Dysuria and Strangury of.. 360
Ophthalmia, Sympathetic, Arrested by Early Enucleation of the Injured Eye..... 321
Ophthalmia Sympathetic..... 105
Ophthalmic Matters in Berlin..... 248
Surgery, Ethyl Bromide in..... 92
Ophthalmoscope—Its Origin and Use as an Aid in Diagnosis..... 125
Opinion Wanted..... 441, 468
Opium, Spirit of Ether as a Corrigent of..... 376
Poisoning, Treatment of..... 116
Orchitis, Salicylate of Soda in..... 401
Oxalic Acid, Emmenagogue Action of..... 96

Page.
Oxaluria..... 272
Oxygen Baths in Febrile Conditions..... 382

Palmer, Dr. Alonzo B., Death of..... 558
Paracoto in Dysentery..... 317
Paraldehyde, An Agreeable Vehicle for..... 39
Urethan, Hyoscine and Hypnone Compared..... 68
Paralysis, Oculo-Motor, Periodically Recurring, 318
Paris, Treatment of Abortion in..... 449
Parke, Davis & Co., Detroit, Mich., On Gleditschine (Stenocarpine) Sensation Exploded, 465, 489
Pardotiditis, A Case of Specific, Resulting in Death..... 85
Parturition, Quinine in..... 174
Patterson, Dr. C. K., Fort Scott, Kansas, On Intubation of The Larynx Instead of Tracheotomy..... 15
Pavesi's Hæmostatic..... 424
Pseudomembranous Bronchitis, A Case of Chronic..... 49
Laryngitis Treated by Electrolysis..... 9
Pediculi Pubis, A Remedy for..... 496
Pepsine and Strychnine, Arseniate of..... 312
in The Treatment of Chronic Tropical Diarrbœa..... 239
Injections in Tumors..... 189
Peptone Enemata, The Nutrient Value of..... 235
Peptonizing Milk, Hints in..... 336, 382
Pericarditis and Endocarditis, A Case of..... 313
Peritonitis..... 291
Lavage of The Stomach in..... 264
Permanent Bath, Therapeutic Value of..... 381
Pernicious Anæmia..... 379
Peroxide of Hydrogen in Whooping Cough..... 181
Peritonitis, Acute General, Without Pain..... 29
Persons Apparently Dead, Simple Method of Reviving..... 115
Pharyngitis, Chronic..... 183
Pharynx Diseases of Vault of..... 7
Phenate of Cocaine..... 288
Phosphates, on the Exhibition of the..... 457
Phosphorus in the Treatment of Broncho-Pneumonia..... 408
Rachitis..... 501
and Its administration..... 360
Phthisis, Aniline Inhalations in..... 240
Artificial and hyperalimentation in.... 309
Bergeon's Method of Treating, by Gaseous Anemata..... 220
Creasote in.....432, 478, 527, 548
Dietary of Children Inheriting a Tendency to..... 474
Eucalyptol in..... 192
Iodoform in..... 375
Night Sweats of Treated by Secale Cornutum..... 480
Novel Treatment of..... 24
Pulmonary, Dietetics of..... 167
Pulmonalis, Climatic Treatment of... 499
Sulphuretted Hydrogen in Treatment of..... 42
Treatment of by Gaseous Enemata.... 137
Large Doses of Tannin..... 190
The Contagiousness of..... 173
Use of Sulphuretted Hydrogen in, 171
Physicians' Fees.....11, 13, 14, 17, 132, 159
of the Future..... 541
to Report Whooping Cough..... 371
Physiological Action of Cocaine..... 238
Ulexine..... 504
Phytolacca Decandra..... 102

Page.

Phytolacca Decandra, in Goitre..... 158
Phthiriasis Pubis, the Treatment of..... 424
Pichi in Dysuria..... 249
for Cystitis..... 216
in Vesical Tenesmus..... 229
Fluid Extract of in Vesical Catarrh..... 525
in Urinary Calculi..... 370
Picrate of Ammonia, the Treatment of Malarial Diseases by.....187, 237
Pilocarpine as a Galactagogue..... 455
The Use of in the Treatment of Acute Affections of the Respiratory Organs..... 524
Pills and Capsules, Terpinol in..... 504
Piperonal..... 288
Piscidia Erythrina, Called in Brazil Mulong, on the Use of, as an Analgesic Remedy.....70, 477
as a Uterine Sedative..... 72
Pitcher, Dr. Zina, Sitka, Alaska, on Cremation Among the Tlinkets..... 123
Detroit, on Contagiousness of Phthisis... 173
Some New Remedies in Rheumatism..... 244
the Action of Medicine.... 394
Pityriasis Versicolor..... 520
Plea for Legal Recognition..... 100
Pleurisy, Secondary, Cancer of the Testicle with, 319
Treatment of in Children..... 95
Pneumonia, Antiseptic Treatment of..... 22
Antipyrine in..... 32
Croupous, Treatment of..... 205
Peculiar Eruption Accompanying.. 108
Treatment of in Children..... 254
Pneumatic Differentiation and Medication..... 55
Bergeon Treatment..... 349
Poisons and Their Antedotes..... 442
Poisonous Snakes, Venom of..... 45
Polypus Complicating Pregnancy..... 395
Pomade for Cutaneous Disorders During Pregnancy..... 254
Porter, Dr. C. Y., Key West, Fla., on Sanitation in Florida..... 269
Potash, Nitrate of, as an Anti-emetic..... 552
Potassium, Chlorate of, in Epithelioma..... 237
the Treatment of Cancer..... 260
Prairie Itch, or Eczema Papulosa Contagiosa... 428
Pregnancy, a New Method of Treating Vomiting of..... 548
Cocaine in the Incoercible Vomitings of..... 264
Polypus Complicating..... 395
Pomade for Cutaneous Disorders During..... 254
Rectal Injection of Chloral in Vomiting of..... 191
Severe Gastric Disturbance During, 71
Preliminary Education..... 177
Pro Bono Medico on the Contract System..... 467
Prolapsus Ani, Cascara Cordial in..... 229
Uteri in the Third Degree, Thomas' Classification..... 370
Prophylatic Treatment of the Teeth..... 403
Prostate Enlargement of and Cystitis..... 348
Management of Enlarged..... 46
Prostatitis, Report of a Severe Case of..... 295
Prostatomy..... 398
Prurigo, the Contagiousness of..... 460
Pruritus of the Female Genitals..... 448

Page.

Puerperal Septicæmia, Prevention of..... 502
Fever, the Prevention of..... 515
Pulmonary Affections, Discussion on the Treatment of, by Gaseous Enemata, with Exhibition of Apparatus.... 222
Injections of Eucalyptol in Certain..... 310
Phthisis, the Dietetics of..... 167
Purest Blood, Where is it?..... 159
Pyelitis, a Case of, of Nineteen Years' Duration, Caused by Renal Calculus, Recovery..... 82
Pyridine in Asthma..... 24

Quarantine Does Not Deal with the Most Dangerous Diseases..... 491
Quebracho, Notes Upon the Local Use of Fluid Extract..... 552
Quinine and Atropine..... 108
Citrate of Iron with Cascara Cordial..... 240
Hydrobromate of..... 264
in Parturition..... 174

Rabies, an Experimental Research upon..... 250
Rachitis, Phosphorus in the Treatment of..... 501
Randall, Dr. H. R., Winona, Minn., on a Well-Nigh Fatal Case of Chloroform Narcosis... 536
Randolph, Dr. N. A., Death of..... 399
Rattlesnake Poison..... 44
Rectal Alimentation in Diseases of the Skin.... 453
Injection of Chloral in Vomiting of Pregnancy..... 191
for the Convulsions of Children.....329, 480
of Gas..... 68
Rectum, Diseases of..... 298
Red Wine in Bed-Wetting..... 527
Reed, Dr. A. M., Clarion, Pa., on Physicians' Fees..... 132
Reese, Dr. W. A., Eureka, Springs, Ark., on Physicians' Fees..... 13
on That Unusual Form of Typhoid Fever.. 486
on Climate and Water in Treatment of Disease..... 219
Reform in Treating Womb Disease..... 119
Refrigeration of the Sound Limb, Sciatica Treated by..... 456
Renal Calculus, a Case of Pyelitis of Nineteen Years' Duration, Recovery Caused by..... 82
Resection of a Portion of the Alimentary Canal, a Report Three Cases of..... 413
Resorcin in the Treatment of Nasal Catarrh.... 455
Skin Diseases.... 520
Respiratory Organs, the Use of Pilocarpine in the Treatment of Acute Affections of the... 524
Restorative Measure, Should Transfusion of Blood be Practiced as a..... 142
Retro-Peritoneal Tumor, a..... 505
Rheumatic Fever, Treatment of..... 69
Rheumatism, Articular, Salol in..... 162
Gaultheria in..... 216
Ichthyol in..... 568
Latent..... 461
Salol the New Remedy for..... 207
Some New Remedies in..... 244
Treatment of in Boston Hospitals..... 43
Rhinoplasty, a Sucessful Case of..... 193
Rhus Aromatica..... 70
in Enuresis..... 356
for Noctural Enuresis..... 216
Robinson, Dr. J. A., Chicago, on Climatic Treatment of Disease..... 145

Page.

Robinson, Dr. J. B., Mt. Vernon, Ia., on a Severe Case of Prostatitis..... 295
Rogers, Dr. S. G., Dalton, Ind., on Syrup Trifolium Co. in Syphilis..... 158
Rohe, Dr. G. H., Baltimore, Md., on Recent Advances in Preventive Medicine..... 245
Rosenberry Dr. A. J., Wauseon, Wis., on Antipyrine..... 461
On Acute General Peritonitis Without Pain, 29
On a Case of Specific Parotiditis Resulting in Death..... 85
Rœtheln..... 333
versus Scarlet Fever..... 101
Rouse, Dr. W. H., Detroit, Mich., on Some Irregular Cases of Diphtheria..... 97
Rupture of Duetus Communis Choledochus..... 31

Sac of an Aneurism of the Leg..... 440
Saccharin, Employment of..... 564
Sanborn, Dr. E. N., Somerville, Mass., on Physicians' Fees..... 159
Sanitation in Florida..... 269
Santonin, How to Prescribe..... 432
Salicin in the Treatment of Scarlatina..... 360
Salix Nigra..... 496
As a Sexual Sedative..... 380
Salol..... 496
in Articular Rheumatism..... 162
and Acute Febrile Disease..... 258
Bowel Complaints..... 371
Over-rated..... 568
Sciatica..... 144
The New Remedy for Rheumatism..... 207
Salt Baths in Fevers..... 48
Scabies, Ointment for..... 448
Scalds and Burns of the Second Degree, Cocaine Combined with Lanolin for..... 120
Scarlatina, Contagiousness of..... 36
Mercury Biniodide in..... 16
Scarlet Fever vs. Rœtheln..... 101
Guaiac in the Treatment of..... 555
Scars, What Diseases of the Skin Leave..... 329
Schede's Method of Dressing Wounds..... 216
Sciatica, Dr. Metcalf on Treatment of..... 96
Salol in..... 144
Treatment of..... 254
by Refrigeration of the Sound Limb..... 456
Scirrhous Tumor of Mammary Gland, Removal of..... 60
Scott, Dr. J. Z., Scandia, Kansas,
On Antipyrine and Antifebrine..... 491
Chloral Hydrate in Labor..... 160
Constipation in Kansas..... 348
Quinine in Parturition..... 174
Stigmata Maidis and Eupatorium Purpureum..... 294
Scrofulous Glands..... 399
Local Treatment of..... 305
Neck, Local Applications to..... 191
Sea-Sickness, The Treatment of..... 498
Sebaceous Tumors, A Simple Method of Extirpating..... 95
Seborrhœa, Ointment for..... 448
Secale Cornutum, Night Sweats of Phthisis Treated by..... 480
Sedatives, Use of in Insanity..... 112
Seely, Dr. Fairbault, Minn., On Pichi in Urinary Calculi..... 370
Self-Abuse and Insanity..... 17
Seltzer Water as an Anodyne in Cases of Superficial Burns..... 360

Page.

Semple, Dr. Wm. Paducah, Ky., On Grindelia Squarrosa..... 160
Senex, On Newspaper Advertising..... 512
Sewers, The Air in..... 397
Sexual Sedative, Salix Nigra as a..... 380
Sick-Room, Cheerfulness in,..... 514
Don'ts for..... 46
Management of..... 91
Sick Headache, Guarana in..... 432
Sickles, Dr. C. B., Ashley, Mich., on Medical Regulation by Legislation..... 556
Silver, Nitrate of in The Treatment of Gonorrhœal Epididymitis..... 424
Skin Diseases, Resorcin in the Treatment of..... 520
Value of Soap in..... 330
Rectal Alimentation in Diseases of the..... 453
To Remove Stains of Iodine from the..... 72
Verbascum in Diseases of..... 480
What Diseases of the, Leave Scars..... 329
Sleeplessness of Insane, Jamaica Dogwood in.. 430
Small Doses, Oft Repeated..... 516
Small-Pox, Iodoform Vaseline in..... 192
Smith, Dr Eugene, Berlin, Germany, on Ophthalmic Matters in Berlin..... 248
Snakes, Venom of Poisonous..... 45
Soap Value of in Skin Diseases..... 330
Sodium, Bicarbonate of in the Treatment of Gonorrhœa..... 142
Soda, Bicarbonate of in Tonsillitis..... 192
Salicylate of in Orchitis..... 401
Sodium Arseniate and Lithium Carbonate Dissolved in Carbonic Acid Water in the Treatment of Diabetes Mellitus..... 377
Benzoate as a Specific for Diphtheria, 70
Iodide, The Hypodermic Use of..... 24
Salicylate and Arsenic in Diabetes..... 262
Solanine, Analgesic Properties of..... 43
Therapeutic Application of..... 168
Sore-Throat, Neuralgic, Treatment of..... 333
Sparteine, A Heart Stimulant..... 384
and Nitro-Glycerin in Morphine Habit..... 358
Sulphate, Medical Uses of..... 143
Spinal Cord, Irritation of the..... 409
Spine, Lateral Curvature of the..... 87
Spleen, Fluorides of Ammonium and Iron in Hypertrophy of the..... 283
Spray for the Treatment of Whooping-Cough... 552
Stair, Dr. J. G., Buckingham, Ill.,
On An Explosive Compound..... 80
Starch-Containing Foods, on the Alleged Dangers of in Infancy..... 334
Stenocarpine..... 450
Gleditschine..... 467
Stevens, Dr. J. V., Prairie Du Lac, Wis.,
On Phytolacca Decandra in Goitre..... 158
On Regulation of the Practice of Medicine by Law..... 487
Stigmata Maidis..... 85, 258, 294
Stimulant, the New Non-alcoholic, Galazyne... 192
Stomach, Lavage of the, in Peritonitis..... 264
To Relieve Pain of Cancer of..... 208
Stomatitis, Mercurial, Cocaine in..... 120
A Remedy for..... 496
Strangulated Hernia, Two Series of Cases of Contrasted, Lessons to be Learned from Them, 481
Strangury and Dysury of Old Age, Relief of.... 360
Stricture, Cocaine in..... 551
of Nasal Duct, Some Modifications in Treatment of..... 104
of the Œsophagus..... 86
of Urethra, Treatment..... 398
Strophanthin..... 24
Strophanthus Hispidus..... 521

Page.

Struma, Hygienic Treatment of. 563
Students, a Plea for the Better Preparation of, before Entering upon the Study of Medicine.. 169
Stuttering. A new Cure for. 424
Stye, Treatment of. 456
Stylosanthes. 160
Submucous Injections in Chronic Throat and Nasal Diseases. 502
Subcutaneous Injections of Citrate of Iron. 240
Success. 248
Mistakes. 248
Sulpho-Carbonated Waters, De Champeaux on the Treatment of Chronic Diarrhœa by. 191
Sulphur, To Effect the Excretion of by the Lungs. 552
The Treatment of Chlorosis with. 263
Sulphuretted Hydrogen in the Treatment of Phthisis. 42, 171
Sumach, Sweet, in Enuresis, Unna on. 263
Sunstroke. 342
Antipyrine in. 260
Surface, Dr. O. B., On a Singular Case. 322
Surgeon's Life, A. 500
Surgery, Antiseptic. 73
Surgical Operations, Feeding After. 167
Suttie, George, Detroit, Mich., On Beef Tea. 61
Sweating of the Extremities and Axilla, Naphthol in. 375
Synovitis of the Knee Joint, Cases of. 366
Synthesis, Conine by. 72
Syphilis, Calomel Injections by a New Method in, 282
Report of Nine Cases of, Treated with Syrup Trifolium Compound. 67
Syrup Trifolium in. 10, 15, 158, 442
Syphilitic Eruptions. 289
Patients, Dry Hot-Air Baths for. 384
Syrup Trifolium Compound. 394
Report of Nine Cases of Syphilis Treated with. . . . 67
in Syphilis. . . . 158, 442
Treatment of Scrofulous Glands by. . . . 305

Tannin, Treatment of Phthisis by Large Doses of. 190
Tape-Worm, Thymol for. 335
Tea, Coffee and Coca, Influence of on Digestion. 287
Teeth, Prophylatic Treatment of. 403
Terebene in Diseases of the Lungs. 477
and Hamamelis, Collective Investigation of. 309
Pure, a Possible Danger Attending the Use of. 120
Terpinol in Pills and Capsules. 504
Testicle, Cancer of the, with Secondary Pleurisy, 319
Transplantation of an Undescended. . . 348
Tetanus, a Case of Cured by Hypodermic Injections of Cocaine. 383
Thallin and Antipyrin, Antipyretic Action of. . . 5
in the Treatment of Typhoid 118, 431
The Bacillus of Malaria. 21
Theism, the New Nervous Disease. 239
Therapeutic Action of Certain Drugs, Notes on 539
Application of Collinsonia Canadensis. 551
of Conium. 255
and Etiology of Migraine. 257
Therapeutics of Neuralgia of the Head. 552

Page.

Therapeutics, the Abuses of Milk Diet in. 356
Uses of Ichthyol in. 93
Vascular. 117
Therapy of Lithia Water, a Contribution to the Study of. 433
Thompson, F. A., Detroit, Mich., on Report of an Authentic Sample of Two-per Cent. Solution of Gleditschine 485
Thorny Honey Locust. 490
Thread-Worms, Treatment of, in Children. 168
Throat Ailments, an Unrecognized Cause of Many. 497
and Nasal Diseases, Submucous Injections in Chronic. 502
Thymol for Tape Worm. 335
in the Treatment of Atrophic Nasal Catarrh. 209
in Diabetes Mellitus. 564
Some of the Medical Uses of. 430
Tibia, Excision of the 86
Tick Bites. 218
Tilley, Dr. Robert, Chicago, Ill., on Atheroma of the Left Coronary Artery Resulting in Aneurism of the Apex of the Left Ventricle, 436
Tinctures vs. Fluid Extracts. 88
Tinkets, Cremation Among. 123
Tobacco, Muscular Rheumatism Due to the Use of. 72
Tonic, a General. 208
Tonsillitis. 401
Bicarbonate of Soda in. 192
Toxic Agent, Cocaine Not a Dangerous. 71
Tracheotomy, Practical Hint for Performance of, 41
Transfusion, the Effects Upon the Heads of Decapitated Animals. 398
Trifolium Syrup Comp. in Syphilis. 10
Truss, a Convenient, for Infants 373
Tubercular Consumption, Is it Inherited?. 35
Joint Diseases, Calcium in. 429
Tuberculosis and the Bacillus Theory. 47
Hydrofluoric Acid in 71
Kolischer's Treatment for. 503
of the Lung, Axillary Adenitis in.. 503
Tumors, a Case of Intra-ocular. 104
Pepsin in. 189
Sebaceous, a Simple Method of Extirpating 95
Turpentine, Oil of, as an Antiseptic. 548
in Chronic Catarrhal Affections. 184
in Diphtheria. 528
Twiner, Dr. Thos. H., Larned, Kansas, on Mercury Biniodide in Diphtheria and Scarlatina, 16
Typhoid and Typho-malarial Fever. 515
Antipyrine and Thallin in the Treatment of. 431
Cold Water Treatment of. 429
Eucalyptus a Specific for. 231
Fever, Antifebrine in. 190
Conditions Stimulating. 332
Corrosive Sublimate in 119
How it is Spread and How it May be Prevented. 488
Inhalations of Cold Air in 94
Is the Present Antipyretic Treatment of, Beneficial?. 33
Note on Usual Form of. 459
Some Points in the Treatment of, 551
Thallin in. 118
That Unusual Form of. 486, 530
Treatment of. 540
the Development and Preservation of.. 336
Typho-malarial and Typhoid Fever. 515
Fever. 532

Page.
Ulcers, Benzoin in the Treatment of..... 262
Resin in 168
New Remedies for..... 96
Ulexine, Physiological Action of..... 504
Unna on Sweet Sumach in Enuresis 263
Uræmia and Nephritis, Nitro-Glycerin in..... 455
Urethral and Vesical Calculi..... 346
Urethan, Hyoscine, Hypnone and Paraldehyde Compared..... 68
Urethra, Treatment of Stricture of the..... 398
Uric-Acid Calculi, Biborate of Ammonium for.. 383
Diathesis, A Useful Powder for the Treatment of..... 328, 376
Urinary Calculi, Pichi in..... 370
Diseases, Naphthaline in..... 24
Urobilinuria..... 527
Ustilago Maidis..... 512
Uterine Hemorrhage, Hydrastis Canadensis in, 114
Ice or Hot-Water in ?.... 261
Normal Liquid Ergot in a Case of..... 319
Sedative, Piscidia Erythrina as a..... 72
Sedative, Amyl Nitrite as a..... 240

Vaginitis, Local Treatment of..... 24
Variola..... 520
Variola, Xylol in..... 260
Vascular Therapeutics..... 117
Vaseline, The Use of in Antiseptic Hypodermic Injections..... 144
Vegetable Astringents, Action and Therapeutic Value of..... 47
Ventilation and Heating of Public Buildings.... 553
the Problem of..... 559
Verbascum in Diseases of the Skin..... 480
Vercoe, Dr. James, Mount Vernon, Wash. Ter., on Enlargement of Prostate and Cystitis..... 348
Vesical Calculi and Urethral..... 346
Catarrh, Fluid Extract of Pichi in..... 525
Douches, Solutions for..... 456
Irritation, An Anodyne for..... 455
Tenesmus, Pichi in..... 229
Viburnum Prunifolium in Threatened Abortion, 141, 565
Vomiting of Pregnancy, A New Method of Treating..... 548
Cocaine in the Incoercible..... 264
Rectal Injection of Chloral in..... 191

Page.
Vulvar Pruritus, Glycerole for..... 401

Wafers to Disguise Taste of Medicines..... 568
Walker, Dr. H. O. Detroit, Mich., A Clinical Lecture by..... 73
On Resection of Portion of Alimentary Canal..... 413
Ward, Dr. A. G., Fairfield. Iowa, on Pichi in Vesical Tenesmus..... 229
Dr. E. B., Laingsburg, Mich., on What Shall We do with Baldness..... 391
Dr. E. J., Waxachie, Texas, on Typho-Malarial Fever..... 532
Warming-Crib or Corveuse..... 316
Watts, Dr. C. M., Auxvasse, Mo., on Normal Liquid Ergot..... 467
Wessinger, Dr. J. A., Howell, Mich., on An Anomaly of the Cord..... 197
Weston, Dr. E. B., Chicago, Ill., on Synovitis of Kneee-Joint..... 366
White, Dr. Arthur, Rockport, Ind., on the Contagiousness of Prurigo..... 460
Walter, Rockport, Ind., on Alopecia Adnata..... 318
Nettle, Dujardin-Beaumetz on the Therapeutic Uses of..... 408
Swelling, Kolischer's Treatment of..... 407
Whooping Cough and Bronchitis, Eucalyptus in, 552
Grindelia Robusta in..... 288
Peroxide of Hydrogen in.... 181
Physicians to Report..... 371
Spray for the Treatment of... 552
Wiley, Dr. C. B., Brighton, Mich., on An Opinion Wanted.....441, 468
Witherspoon, Dr. R. G., Holland's Store, S. C., on Paracoto in Dysentery..... 337
Womb Disease, Reform in Treating..... 119
Wounds, Schede's Method of Dressing..... 216
Wyman, Dr. Hal C., Detroit, Mich., On Abdominal Surgery and How to Learn It.....337, 361, 385
On Interesting Surgical Cases..... 60
On Laparotomy for Obscure Intestinal Disease..... 242

Xylol in Variola..... 260

Yemans, Dr. C. C., Detroit, Mich., on Syphilitic Eruptions..... 289
Yerba Santa as a Vehicle of Cinchona Alkaloids, 239